Figure 1: HIV-1 gp41 Structure and Peptides

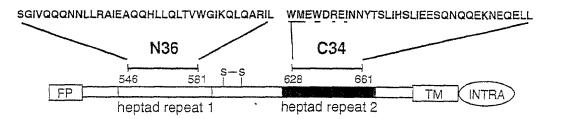
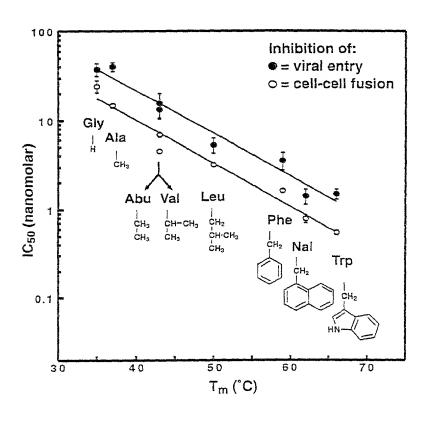


Figure 2: Correlation of C34 Inhibitory Potency With N36/C34 Stability



Docket/App No.: 0399.1192-008

Title: Inhibitors of HIV Membrane Fusion Inventors: Debra M. Eckert, et al.

Figure 3: D-peptide Sequences

D10pep1: Ac-GACEARHREWAWLCAA-CONH2
D10pep1a: Ac-KKGACEARHREWAWLCAA-CONH2

D10pep3: Ac - KK G A C G L G Q E E W F W L C A A - CONH2

D10pep4: Ac - GACDLKAKEWFWLCAA - CONH2

D10pep5: Ac - KK G A C E L L G W E W A W L C A A - CONH2
D10pep5a: Ac - KKKK G A C E L L G W E W A W L C A A - CONH2

D10pep6 : Ac - G A C S R S Q P E W E W L C A A - CONH2
D10pep6a : Ac - KK G A C S R S Q P E W E W L C A A - CONH2

D10pep7a: Ac - KK G A C L L R A P E W G W L C A A - CONH2

D10pep10: Ac - KK G A C M R G E W E W S W L C A A - CONH2

D10pep12: Ac - K K G A C P P L N K E W A W L C A A - CONH2

Consensus Sequence

CXXXXXEWXWLC

Where:

G = glycine

A = alanine

C = cysteine

D = aspartic acid

L = leucine

K = lysine

E = glutamic acid

W = tryptophan

F = phenylalanine

R = arginine

H = histidine

S = serine

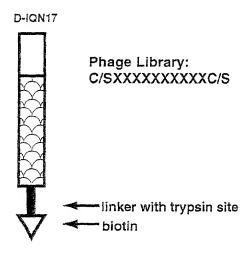
Q = glutamine

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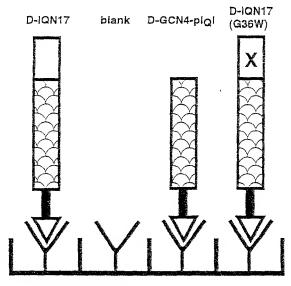
Title: Inhibitors of HIV Membrane Fusion Inventors: Debra M. Eckert, et al.

Figure 4: Mirror-Image Phage Display with the D-IQN17 Target

1. Perform rounds of phage selection to identify binders to D-IQN17.

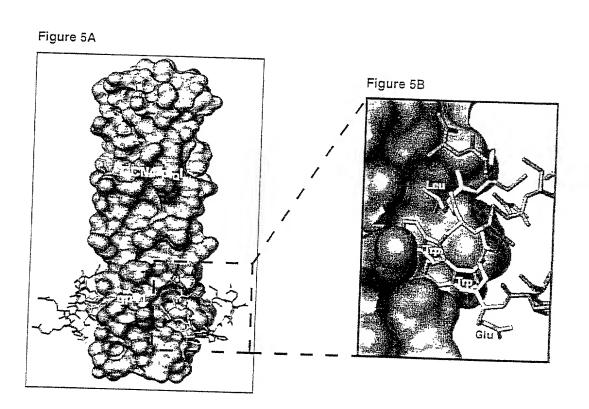


- 2. Sequence individual phage clones
- 3. Test for specificity of binding. Determine if the phage bind to the gp41 region of D-IQN17.



- 4. Synthesize D-peptides.
- 5. Assay anti-HIV activity of D-peptides.

Relationship of D-peptides to IQN17



Docket/App No.: 0399.1192-008 Title: Inhibitors of HIV Membrane Fusion

Inventors:

Debra M. Eckert, et al.

Syncytia Assays



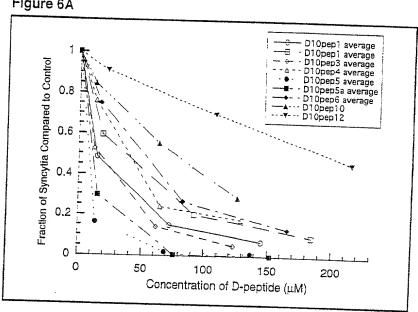


Figure 6B: IC₅₀ Data for D-Peptides:

D-Peptide	Approximate IC ₅₀ Value (from one or more experiments)
D10pep1	2 x 10 ⁻⁵ M
D10pep1A	3 x 10 ⁻⁵ M
D10pep3	1 x 10 ⁻⁵ M
D10pep4	3 x 10 ⁻⁵ M
D10pep5	3 x 10 ⁻⁶ M
D10pep5a	6 x 10 ⁻⁶ M
D10pep6	3 x 10 ⁻⁵ M
D10pep7a	4 x 10 ⁻⁵ M
Dpep10	6 x 10 ⁻⁵ M
Dpep12	2 x 10 ⁻⁴ M

show anti-viral effects with IC_{50} values of less than 1 x 10^{-4} M. D10pep3 D10pep4 D10pep5

```
REMARK
         3
 REMARK
          3 REFINEMENT.
 REMARK
               PROGRAM
                           : CNS 0.5
 REMARK
              AUTHORS
                          : BRUNGER, ADAMS, CLORE, DELANO,
 REMARK
                            GROS, GROSSE-KUNSTLEVE, JIANG,
 REMARK
                             KUSZEWSKI, NILGES, PANNU, READ,
 REMARK
                             RICE, SIMONSON, WARREN
 REMARK
         3 DATA USED IN REFINEMENT.
 REMARK
 REMARK
              RESOLUTION RANGE HIGH (ANGSTROMS) : 1.50
 REMARK
              RESOLUTION RANGE LOW (ANGSTROMS) :10.00
 REMARK
         3
              DATA CUTOFF
                                     (SIGMA(F)) : 0.0
 REMARK
              DATA CUTOFF HIGH
                                      (ABS(F)) ;
                                                     646169.44
         3 DATA CUTOFF LOW
 REMARK
                                       (ABS(F)) :
 REMARK
         3 COMPLETENESS (WORKING+TEST) (%): 94.6
 REMARK
              NUMBER OF REFLECTIONS
                                                : 13549
 REMARK
 REMARK
         3 FIT TO DATA USED IN REFINEMENT.
 REMARK
          3
             CROSS-VALIDATION METHOD
                                                : THROUGHOUT
            FREE R VALUE TEST SET SELECTION : RANDOM
 REMARK
REMARK
         3 R VALUE
                       (WORKING SET) : 0.214
         3 FREE R VALUE
3 FREE R VALUE TEST SET SIZE
REMARK
REMARK
                                           (%): 10.1
REMARK
         3 FREE R VALUE TEST SET COUNT
                                               : 1362
REMARK
         3
             ESTIMATED ERROR OF FREE R VALUE : 0.007
REMARK
         3 FIT IN THE HIGHEST RESOLUTION BIN.
REMARK
REMARK
         3 TOTAL NUMBER OF BINS USED
REMARK
             BIN RESOLUTION RANGE HIGH
                                              (A): 1.50
         3 BIN RESOLUTION RANGE LOW
REMARK
                                              (A): 1.59
REMARK
         3 BIN COMPLETENESS (WORKING+TEST) (%): 96.1
REMARK
         REFLECTIONS IN BIN (WORKING SET): 2008
BIN R VALUE (WORKING SET): 0.233
REMARK
                                   (WORKING SET) : 0.233
REMARK
         3 BIN FREE R VALUE
                                                  : 0.270
         3 BIN FREE R VALUE TEST SET SIZE (%): 9.8
3 BIN FREE R VALUE TEST SET COUNT: 219
REMARK
REMARK
REMARK
         3 ESTIMATED ERROR OF BIN FREE R VALUE : 0.018
REMARK
         3
REMARK
         3 NUMBER OF NON-HYDROGEN ATOMS USED IN REFINEMENT.
REMARK
         3 PROTEIN ATOMS
                                 :
REMARK
             NUCLEIC ACID ATOMS
         3
             HETERCGEN ATOMS
REMARK
                                            0
            SOLVENT ATOMS
REMARK
         3
REMARK
         3
REMARK
         3 B VALUES.
            FROM WILSON PLOT
REMARK
                                       (A**2) : 21.6
REMARK
             MEAN 3 VALUE (OVERALL, A**2) : 29.7
         3
REMARK
             OVERALL ANISOTROPIC B VALUE.
         3
             B11 (A**2) : 3.61
B22 (A**2) : 3.61
REMARK
REMARK
         3
             B33 (A**2) : -7.22
B12 (A**2) : 1.74
B13 (A**2) : 0.00
REMARK
         3
REMARK
         3
REMARK
             B23 (A**2) : 0.00
REMARK
REMARK
REMARK
            BULK SOLVENT MODELING.
            METHOD USED : FLAT MODEL
REMARK
        3
REMARK
             KSOL
                        : 0.394054
```

Figure 7A

```
REMARK
       3 ESOL
                   : 58.3445 (A**2)
 REMARK
 REMARK
        3 ESTIMATED COORDINATE ERROR.
        3 ESD FROM LUZZATI PLOT
 REMARK
                                 (A) : 0.18
 REMARK
        3
          ESD FROM SIGMAA
                                 (A): 0.09
 REMARK
        3
          LOW RESOLUTION CUTOFF
                                 (A): 5.00
 REMARK
 REMARK.
        3 CROSS-VALIDATED ESTIMATED COORDINATE ERROR.
 REMARK
           ESD FROM C-V LUZZATI PLOT
                               (A): 0.20
 REMARK
          ESD FROM C-V SIGMAA
                                 (A) : 0.12
 REMARK
        3 RMS DEVIATIONS FROM IDEAL VALUES.
 REMARK
 REMARK
        3
          BOND LENGTHS
                                (A) : 0.012
 REMARK
          BOND ANGLES
                            (DEGREES) : 1.5
          DIHEDRAL ANGLES
 REMARK
        3
                            (DEGREES) : 15.7
 REMARK
        3
          IMPROPER ANGLES
                            (DEGREES) : 1.00
 REMARK
 REMARK
       3 ISOTROPIC THERMAL MODEL : RESTRAINED
 REMARK
 REMARK
       3 ISOTROPIC THERMAL FACTOR RESTRAINTS.
                                        RMS
                                              SIGMA
 REMARK
       3 MAIN-CHAIN BOND
                                (A**2) : 0.956 ; 2.0
REMARK
          MAIN-CHAIN ANGLE
       3
                                 (A**2) : 1.503 ; 3.0
REMARK
       3
          SIDE-CHAIN BOND
                                 (A**2) : 1.853 ; 3.0
REMARK
                                (A**2) : 2.676
         SIDE-CHAIN ANGLE
REMARK
REMARK
       3 NCS MODEL : NONE
REMARK
      3 NCS RESTRAINTS.
REMARK
                                        RMS
                                           SIGMA/WEIGHT
         GROUP 1 POSITIONAL GROUP 1 B-FACTOR
REMARK
                                (A) : NULL ; NULL
REMARK
                                (A**2) : NULL ; NULL
      3
3 PARAMETER FILE 1 : protein_rep_d.param
3 PARAMETER FILE 2 : CNS_TOPPAR/water_rep.param
REMARK
REMARK
REMARK
REMARK
      3 PARAMETER FILE 3 : CNS_TOPPAR/ion.param
      3 TOPOLOGY FILE 1 : CNS_TOPPAR/protein.top
3 TOPOLOGY FILE 2 : CNS_TOPPAR/water.top
3 TOPOLOGY FILE 3 : CNS_TOPPAR/ion.top
REMARK
REMARK
REMARK
REMARK
REMARK
      3 OTHER REFINEMENT REMARKS: NULL
      1 A 214 ACE ARG MET LYS GLN ILE GLU ASP LYS ILE GLU GLU ILE
SEQRES
SEQRES
       2 A 214 GLU SER LYS GLN LYS LYS ILE GLU ASN GLU ILE ALA ARG
       3 A 214 ILE LYS LYS LEU LEU GLN LEU THR VAL TRP GLY ILE LYS
SEQRES
SEQRES
      4 A 214 GLN LEU GLN ALA ARG ILE LEU ACE DLY DLA DCS DLU DLA
SEQRES
       5 A 214 DRG DIS DRG DLU DRP DLA DRP DEU DCS DLA DLA CL WAT
          214
SEQRES
              6 A
      SEORES
SEQRES
      SEQRES
       9 A
           214
              SEORES
SEQRES
      12 A 214
              SEQRES 17 A 214 WAT WAT WAT WAT WAT WAT CRYST1 41.829 41.829 84.817 90.00 90.00 120.00 P 3 2 1
ORIGX1
        1.000000 0.000000 0.000000
                                  0.00000
```

Figure 7B

ORIGX2 ORIGX3 SCALE1 SCALE2 SCALE3 ATOM ATOM ATOM ATOM ATOM ATOM ATOM ATOM	12 23 34 55 77 89 90 111 122 133 144 155	0.00 0.00 0.00 CA C C CA CCB CCD NE CCG CD NHH NHH C O N CA	AC. AC. AR. AR. AR. AR. AR. AR. AR. AR. AR. AR		1.000000 0.000000 0.013803 0.027605 0.000000 0 0 1 1 1 1 1 1 1 2	1.0000 0.0000 0.0000 0.0117 26 830 25.855 27.749 27.625 27	000 0.00000 000 0.00000 000 0.00000 0.000000 0.000000 0.000000 0.000000 7.813 -22.925 9.004 -22.017 9.820 -22.124 9.121 -21.117 10.229 -20.165 11.568 -20.887 12.790 -20.010 14.085 -20.800 15.253 -20.086 15.495 -19.870 14.654 -20.312 16.587 -19.206 10.087 -19.206 10.224 -17.884 9.809 -19.480 9.671 -18.515)))	A A A A A A A A A A A A A A A A A A A
ATOM	17	CB	MET	A.	2	23.074	9.796 -19,202	1.00 54.68	A
ATOM	18	CG	MET	. A	2	22.749	8.736 -20.238	1.00 54.76	
MOTA	19	SD	MET	' A	2	21.345	9.252 -21.275	1.00 55.63	A
ATOM	20	CE	MET		2	22.189	9.658 -22.823	1.00 55.29	A
ATOM	21	С	MET		2	24.557	8.360 -17.755		A
ATOM	22	0	MET		2	24.073	8.249 -16.629	1.00 54.51	A
ATOM	23	N	LYS		3	25.208		1.00 54.42	A
ATOM:	24	CA	LYS		3		7.372 -18.362	1.00 54.34	A
ATOM	25	CB	LYS		3	25.383	6.082 -17.702	1.00 54.29	A
ATOM	26	CG	LYS			26.212	5.139 -18.581	1.00 54.05	A
ATOM	27				3	26.527	3.786 -17.956	1.00 54.04	A
ATOM		CD	LYS		3	27.727	3.853 -17.018	1.00 54.12	A
ATOM	28	CE	LYS		3	28.108	2.469 -16.513	1.00 54.37	A
ATOM	29	NZ	LYS		3	29.332	2.493 -15.656	1.00 53.92	A
	30	C	LYS		3	26.097	6.344 -16.384	1.00 54.33	A
ATOM	31	0	LYS		3	25.779	5.740 -15.353	1.00 54.60	A
ATOM	32	N	GLN		4	27.064	7.255 -16.426	1.00 53.94	A
ATOM	33	CA	GLN		4	27.811	7.626 -15.236	1.00 53.69	A
ATOM	34	CB	GLN		4	28.845	8.699 -15.580	1.00 54.21	A
ATOM	35	CG	GLN		4	29.861	8.974 -14.477	1.00 55.15	A
ATOM	36	CD	GLN		4	29.621	10.285 -13.732	1.00 55.56	A
ATOM	37		GLN		4	29.532	11.354 -14.343	1.00 56.19	A
ATOM	38		GLN		4	29.533	10.209 -12.403	1.00 55.66	A
ATOM	39	C	GLN		4	26.828		1.00 53.19	A
ATOM	40	0	GLN		4	26.972	7.953 -13.008	1.00 53.10	A
ATOM	41	N	ILE		5	25.832		1.00 52.58	A
ATOM	42	CA	ILE		5	24.817	9.523 -13.853	1.00 51.70	A
MOTA	43	CB	ILE	A	5	23.826		1.00 51.71	A
ATOM	44	CG2	ILE		5	22.643		1.00 51.41	A
ATOM	45	CG1	ILE	A	5	24.547		1.00 51.48	A
ATOM	46	CD1	ILE	A	5	23.646		1.00 51.33	A
MOTA	47	С	ILE	A	5	24.051		1.00 51.26	Ā
ATOM	48	0	ILE	Α	5	23.650		1.00 51 09	A
MOTA	49	N	GLU		6	23.864		1.00 50.54	A
MOTA	50	CA	GLU	A	6	23.146		1.00 50.01	A
ATOM	51	CB	GĽU	A	6	22.789		1.00 50.31	A
ATOM	52	CG	GLU	A	6	22.141		1.00 51.26	A
MOTA	53	\Box	GLU	A	б	22.045		1.00 51.68	A

Figure 7C

Docket/App No.: 0399.1192-008

Title: Inhibitors of HIV Membrane Fusion Inventors: Debra M. Eckert, et al.

ATOM 54 OE1 GLU A 6 23.016 3.931 -16.557 1.00 52.29 55 OE2 GLU A 6 56 C GLU A 6 ATOM 4.682 -17.116 1.00 52.25 21.019 ATOM 23,995 5,606 -11.904 1.00 49.32 6 ATOM 57 0 GLU A 23.475 5.210 -10.859 1.00 49.24 5.527 -12.128 ATOM ASP A 58 N 25.302 1.00 48.32 CA ASP A 7 ATOM 59 26.178 4.970 -11.113 1.00 47.23 MOTA 60 CB ASP A 7 27.543 4.626 -11.703 1.00 47.92 ATOM 61 CG ASP A 7 27.450 3.585 -12.788 1.00 48.33 7 MOTA 62 OD1 ASP A 26.526 2.741 -12.729 1.00 48.43 MOTA 63 OD2 ASP A 7 28.310 3.606 -13.690 1.00 48.94 64 C 65 O ASP A 7 26.283 26.344 ATOM 5.920 -9.926 1.00 46.09 5.481 -8.773 1.00 45.71 ATOM ASP A Α 66 N LYS A 8 7.209 -10.201 1.00 44.57 MOTA 26.551 8 26.703 8 26.959 67 CA LYS A ATOM 8.195 -9.129 1.00 43.01 9.598 -9.708 1.00 43.49 MOTA 68 CB LYS A 8 MOTA 69 CG LYS A 25.895 10.076 -10.695 1.00 44.78 26.423 8 8 70 CD LYS A 11.125 -11.702 1.00 45.38 ATOM ATOM 71 CE LYS A 26.698 12.490 -11.068 1.00 45.64 Α 72 NZ LYS A 8 ATOM 27.153 13.499 -12.069 1.00 45.55 73 C 74 O 8 25 413 8 25.419 8.171 -8.318 1.00 41.20 8.346 -7.098 1.00 40.61 MOTA LYS A MOTA LYS A Α 8 25.419 9 24.302 MOTA 75 N ILE A 7.935 -9.002 1.00 39.40 76 CA ILE A 77 CB ILE A 9 MOTA 7.859 -8.333 1.00 37.29 7.859 -9.358 1.00 37.14 23.015 ATOM ILE A 21.872 78 CG2 ILE A 9 21.872 78 CG2 ILE A 9 20.600 A ATOM 7.251 -8 759 1.00 37.06 9 9.303 -9.812 1.00 36.95 9.440 -11.066 1.00 36.89 ATOM 79 CG1 ILE A 20.801 21.631 ATOM 80 CD1 ILE A A ATOM 81 C ILE A 9 22.927 6.638 -7.418 1.00 36.07 Α 82 O ILE A 9 83 N GLU A 10 6.756 -6.292 1.00 34.70 5.478 -7.887 1.00 34.23 ATOM 9 22.450 ATOM 23.389 Α ATOM 84 CA GLU A 10 23.353 4.260 -7.074 1.00 33.04 A 85 CB GLU A 10 86 CG GLU A 10 MOTA 3.013 -7.847 1.00 32.87 23.884 1.705 -6.991 1.00 33.10 MOTA 23.890 -7.747 MOTA 87 CD GLU A 10 24.287 0.417 1.00 33.56 A 88 OE1 GLU A 10 ATOM 24.327 0.442 -8.999 1.00 34.07 24.542 -0.630 -7.084 1.00 32.41 ATOM 89 OE2 GLU A 10 90 C GLU A 10 91 O GLU A 10 -5.878 1.00 32.53 ATOM 24.244 4.556 Α ATOM 24.009 4.069 -4.779 1.00 32,14 92 N GLU A 11 5.380 -6.100 1.00 31.82 ATOM 25.259 93 CA GLU A 11 5.731 -5.018 1.00 31.36 ATOM 26.165 94 CB GLU A 11 95 CG GLU A 11 ATOM 27.409 6.445 -5.536 1.00 33.18 ATOM 28.358 6.833 -4.423 1.00 35.22 96 CD GLU A 11 ATOM 29.105 5.643 -3.822 1.00 36.93 97 OE1 GLU A 11 98 OE2 GLU A 11 MOTA 28.488 4.580 +3.575 1.00 38.03 30.322 5.774 -3.579 1.00 38.85 MOTA GLU A 11 GLU A 11 ILE A 12 ATOM 99 C 25.456 6 621 -3.998 1.00 30.15 ATOM 100 0 25.556 6.377 -2.798 1.00 28.89 24.737 7.640 -4.471 1.00 29.09 ATOM 101 N CA ILE A 12 CB ILE A 12 ATOM 102 8.533 -3.550 1.00 28.34 24.017 9.675 -4.325 ATOM 103 23.301 1.00 28.74 104 CG2 ILE A 12 22.206 10.281 -3.501 1.00 28.70 ATOM CG1 ILE A 12 CD1 ILE A 12 ATOM 105 24.327 10.743 -4.701 1.00 28.84 ATOM 106 23.922 11.603 -5.890 1.00 29.69 MOTA 107 ILE A 12 22.985 7.725 -2.761 1.00 27.83 ILE A 12 GLU A 13 ATOM 108 0 22.802 7.948 -1.560 1.00 26.46 109 N MOTA 6.790 -3.423 1.00 27.40 22.312 110 CA GLU A 13 111 CB GLU A 13 MOTA 21.313 5.965 -2.762 1.00 26.92 ATOM 20.579 5.087 -3.805 1.00 28.34

Figure 7D

ATOM	112	CG	GL	J A	. 13	19	7.760	5.937	-4.810	1.00	29.72	A
MOTA	113	CD	GL	J A	. 13	19	.080	5.118	-5.900		31.77	A
ATOM	114	OE	1 GLT	JA	. 13	19	.671	4.107	-6.331		33.64	A
ATOM	115	OE	2 GLT	JA	13	17	.960	5.495	-6.327	1.00		A
ATOM	116	C		JA			.975	5.110	-1.678		26.36	
ATOM	117	ō		JA			.411	4.912	-0.597	1.00		A
ATOM	118	N		RA			.179	4.629	-1.950		26.17	A
ATOM	119	CA		R A			.899	3.792				A
ATOM	120	CB		? A			.184		-0.999		26.31	A
ATOM	121	OG		\ ? А			.954	3.224	-1.625		26.71	A
ATOM	120	C		? A				2.470	-0.695		30.07	A
ATOM	123	Ö		R A			.246	4.626	0.221		25.81	A
							.079	4.149	1.339		25.13	A
ATOM	124	N	LYS				.753	5.840	0.009		24.70	A
ATOM	125	CA	LYS				.091	6.713	1.151	1.00	25.41	A
ATOM	126	CB	LYS				.805	7.971	0.672	1.00	26.20	A
ATOM	127	CG	LYS		15		.256	7.762	0.285		29.07	A
ATOM	128	CD	LYS		15	27	.875	9.077	-0.220	1.00	30.97	A
ATOM	129	CE	LYS		15	29	.328	8.914	-0.603	1.00	32.08	A
MOTA	130	NZ	LYS	A	15	29	.547	7.749	-1.502	1.00	34.63	A
ATOM	131	С	LYS	A	15	23	.824	7.102	1.938	1.00	24.45	A
ATOM	132	0	LYS	Α	15	23	.862	7.279	3.171	1.00	24.50	A
ATOM	133	N	GLN	A	16	22	.708	7.254	1.247	1.00	24.12	A
MOTA	134	CA	GLN	A	16	21	.450	7.586	1.904	1.00	23.82	A
MOTA	135	CB	GLN	A	16	20	.396	7.815	0.834	1.00	25.71	A
ATOM	136	CG	GLN	A	16		.229	8.643	1.232	1.00		A
ATOM	137	CD	GLN	A	16	18	.543	9.230	0.004	1.00	32.26	A
ATOM	138	OE:	GLN	E.	16	18	.015	8.498	-0.817		34.89	Ā
ATOM	139	NE2	GLN	Α	16	18	.569	10.556	-0.135		32.74	A
ATOM	140	C	GLN	A	16		.027	6.447	2.838		23.67	A
ATOM	141	0	GLN	A	16		.584	6.681	3.979		22.84	A.
ATOM	142	N	LYS	A	17		.160	5.214	2.365		22.83	
ATOM	143	CA	LYS		17		798	4.057	3.179		22.59	A
ATOM	144	CB	LYS		17		939	2.756	2.357		22.86	A A
ATOM	145	CG	LYS		17		340	1.539	3.055		26.69	
ATOM	146	CD	LYS		17		837	1.579	2.932		29.27	A
ATOM	147	CE	LYS		27		177	0.937	4.051		31.75	A.
ATOM	148	NZ	LYS		17		686	0.870	3.940		34.25	A
ATOM	149	C	LYS		17		718	4.015	4.406			A
ATOM	150	Ö	LYS		17		261	3.747	5.515		22.31	A
ATOM	151	N	LYS		18		001	4 306	4.223		21.02	A
ATOM	152	CA	LYS		18		909	4.302	5.374		21.81	A
ATOM	153	CB	LYS		18		348	4.540			21.74	A.
ATOM	154	CG	LYS		18		029	3.321	4.964		24.04	A
ATOM	155	CD	LYS		18		381		4.401	1.00		A
ATOM	156	CE	LYS		18			3.712	3.863	1.00		A
ATOM	157	NZ	LYS		18		972 290	2.592	3.025	1.00		A
ATOM	158	C	LYS		18			3.010	2.472	1.00		A
ATOM	159	0	LYS		18		500	5.376	6.378	1.00		A
ATOM	160	N	ILE		19	23.		5.138	7.577	1.00		A
	161					23.		6.531	5.887	1.00		A
ATOM ATOM	162	CA	ILE		19	22.		7.636	6.762	1.00		A
ATOM		CB	ILE		19	22.		8.926	5.914	1.00		A
	163				19	21.		9.944	6.682	1.00		A
ATOM	164		ILE		19	23.		9.499	5.464	1.00		A
ATOM	165		ILE		19	23.		10.495	4.296	1.00		A
ATOM	166	Ç	ILE		19	21.		7.221		1.00		A
ATOM	167	0	ILE		19	21		7.452		1.00		A
ATOM	168	N	GLU		20	20.		6.569		1.00		A
ATOM	169	CA	GLU	A	20	19	330	6.149	7.503	1.00	30.43	A

Figure 7E

Docket/App No.: 0399.1192-008 Title: Inhibitors of HIV Membrane Fusion

Inventors: Debra M. Eckert, et al.

MCTA	170	CB	GL:	υA	20	18.	. 223	5.608	3 6	.484	1.00	22.94	A
MOTA	171	CG	GT.	U A	20	17.	766	6.671	1 5	.499	1.00		A
ATOM	172	CD	GL.	U A	20	16.	926	6.108	3 4	.378	1.00	29.04	A
MOTA	173	OE:		U A	20	16.	961	4.873	3 4	.177	1.00	30.40	A
MCTA	174	OE:	GL	U A	20	16.	243	6.901	. 3	.691	1.00	30.73	A
ATOM	175	C	GL	J A	20	19.	533	5.109	8	. 576	1.00		A
ATOM	176	0	GLI	JA	20	18.	917	5.127	9	645	1.00		A
ATOM	177	N	ASI	N A	21	20.	478	4.220	8.	.321	1.00	20.53	A
ATOM	178	CA		N A	21	20.	820	3.212		.328	1.00	21.87	A
ATOM	179	CB	ASI	A V	21	21.	694	2.117	8.	720	1.00	24.15	A
MOTA	180	CG	ASI	V A	21	20.	875	1.155	7.	872	1.00	25.28	A
ATOM	181	ODI	. ASI	A V	21	19.	676	0.980	8.	099		28.26	A
MOTA	182	ND2			21	21.	505	0.549	6.	870	1.00	26.78	A
ATOM	183	C		4 A	21	21.	500	3.854	10.	527	1.00	21.75	A
ATOM	184	0	ASI		21	21.	269	3.444	11.	674	1.00	21.80	A
ATOM	185	N	GLU		22	22.	335	4.853	10.	274	1.00	20.99	A
ATOM	186	CA	GLī		22	23.	007	5.548	11.	369	1.00	20.36	A
ATOM	197	CB	GLU		22	24.	059	6.516	10.	825	1.00	22.89	A
ATOM	188	CG	GLU		22	24.		7.169		901	1.00	25.86	A
ATOM	189	CD	GLī		22	25.		6.170		882	1.00	27.97	A
ATOM	190	OEl			22	26.		5.158	12.	444	1.00	30.05	A
ATOM	191	OE2			22	25.		6.411		118	1.00	31.29	A
ATOM	192	¢	GLU		22	21.		6.294		187	1.00	19.79	A
ATOM	193	0	GLU		22	21.		6.264		445	1.00		A
ATOM	194	N	ILE		23	21.		6.951	11.			18.92	A
MOTA	195	CA	ILE		23	19.		7 670	12.		1.00	18.60	A
ATOM	196	CB	ILE		23	19.0		8.388	11.			18.79	A
ATOM ATOM	197	CG2	ILE		23	17.6		8.764	11.		1.00		A
ATOM	198 199	CG1			23	19.		9.598	10.			20.45	A
ATOM	200	CD1			23	19.0		10.223		539		22.51	A
ATOM	200	C 0	ILE		23	19.1		6.687	13.			19.09	A
ATOM	201	N	ALA		23 24	18.8		7.006	14.			18.74	A.
ATOM	203	CA	ALA		24	18.9 18.1		5.479	12.			18.44	A.
ATOM	204	CB	ALA		24	17.8		4.517	13.			18.86	A
ATOM	205	C	ALA		24	18.9		3.257 4.136	12.			19.39	A
ATOM	206	Ō	ALA		24	18.3		3.966	14.			18.66	A
ATOM	207	N	ARG		25	20.2		4.028	14.			19.32	A
ATOM	208	CA	ARG		25	21.1		3.667	15.			18.57	A
ATOM	209	CB	ARG		25	22.5		3.343	15.1		1.00		A
ATOM	210	CG	ARG		25	22.6		1.959	14.6			20.85	A
ATOM	211	CD	ARG		25	24.1		1.536	14.4			25.32	A
ATOM	212	NE	ARG		25	24.7		2.294	13.3			27.13	A
ATOM	213	CZ	ARG		25	24.6		2.019	12.0			27.60	A
ATOM	214	NH1	ARG		25	23.9		0.979	11.6			28.92	A A
ATOM	215	NH2	ARG		25	25.2		2.806	11.2			27.79	A
ATOM	216	С	ARG	A	25	21.0		4.819	16.7		1.00	18.69	A
MOTA	217	0	ARG	A	25	20.9		4.592	17.9			17.93	A
ATOM	218	N	ILE	Α	26	21.2		6.041	16.2			17.83	A
ATOM	219	CA	ILE	A	26	21.1		7.222	17.0			16.94	A
ATOM	220	CB	ILE		26	21.3		8.479	16.2	25		17.99	A
ATOM	221	CG2	ILE		26	20.9		9.741	17.0			19.34	A
ATOM	322	CG1	ILE	A	26	22.8		8.537	15.7			19.88	Ä
ATOM	223	CD1	ILE	A	26	23.1		9.587	14.7			21.83	A
ATOM	224	С	ILE	A	26	19.8		7.301	17.8			18.02	A
MOTA	225	0	ILE	A	26	19.8	75	7.580	19.0		1.00		A
ATOM	226	N	LYS	A	27	18.7	52	7.069	17.1		1.00		A
ATOM	227	CA	LYS	A	27	17.4		7.137	17.8			17.90	A

Figure 7F

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Title: Inhibitors of HIV Membrane Fusion Inventors: Debra M. Eckert, et al.

ATOM	228	CB	LYS	A.	27	16.330	6.994	16.805	1.00 19.01	A
ATOM	229	CG	LYS	A	27	16.266	8,210	15.876	1.00 22.27	A
ATOM	230	CD			27	15.275	7.984	14.711	1.00 24.03	A
ATOM	231	CE	LYS		27	13.860	7.664	15.161	1.00 24.41	A
ATOM	232	NZ	LYS		2~	13.173	8.848	15.714	1.00 27.04	A
ATOM	233	C			27	17.326	6.097	18.969	1.00 18.17	A
MOTA	234	0			27	16.767	6.388	20.013	1.00 18.33	A
ATOM	235	N	LYS		28	17.871	4.896	18.775	1.00 17.00	A
ATOM	236	CA	LYS		28	17.788	3.867	19.790	1.00 17.21	A
MCTA	237	CB	LYS		28	18.244	2.503	19.223	1.00 18.92	A
ATOM	238	CG			28	17.288	1.982	18.164	1.00 24.56	A
ATOM	239	CD	LYS		28	17.833	0.732	17.464	1.00 26.88	A
ATOM	240	CE	LYS		28	16.950	0.371	16.260	1.00 28.84	A
MOTA	241	NZ	LYS		28	17.284	-0.938	15.592	1.00 31.35	A
ATOM	242	C	LYS		28	18.618	4.257	21.016	1.00 17.36	A
ATOM	243	ō	LYS		28	18.159	4.066	22.165	1.00 17.54	A
MOTA	244	N	LEU		29	19.794	4.835	20.793	1.00 16.84	A
ATOM	245	CA	LEU		29	20.642	5.234	21.912	1.00 16.41	A
ATOM	246	CB	LEU		29	22.077	5.529	21.453	1.00 15.26	A
ATOM	247	CG	LEU		29	23.050	6.048	22.515	1.00 16.76	Ã
ATOM	248		LEU		29	23.062	5.096	23.701	1.00 16.47	A
ATOM	249	CD2			29	24.450	6.201	21.885	1.00 17.67	A
ATOM	250	C	LEU		29	20.023	6.429	22.506	1.00 16.92	A
MOTA	251	0	LEU		29	20.027	6.503	23.859	1.00 16.36	A
ATOM	252	N	LEU		30	19.447	7.343	21.820	1.00 15.57	A
ATOM	253	CA	LEU		30	18,818	8.519	22.424	1.00 15.77	A
ATOM	254	CB	LEU		30	18.401	9.501	21.298	1.00 15.65	A
ATOM	255	CG	LEU		30	17.717	10.780	21.696	1.00 17.55	A
ATOM	256		LEU		30	18.557	11.504	32,722	1.00 16.71	A
ATOM	257	CD2			30	17.552	11.602	20.399	1.00 18.10	A
ATOM	258	C	LEU		30	17.659	8.067	23.288	1.00 16.42	A
ATOM	259	0	LEU		30	17.466	8.604	24.399	1.00 17.55	A
ATOM	250	N	GLN		31	16.903	7.053	22.862	1.00 16.79	A
ATOM	261	CA	GLN		31	15.816	6.564	23.692	1.00 18.13	A
ATOM	262	CB	GLN		31	14.945	5.593	22.886	1.00 21.45	A
ATOM	263	CG	GLN		31	14.119	6.358	21.834	1.00 24.92	Ą
ATOM	264	CD	GLN		31	13.196	7.437	22.424	1.00 26.81	Ā
ATOM	265	OE1			31	12.913	8.459	21.786	1.00 28.75	A
ATOM	266		GLN		31	12.713	7.207	23.648	1.00 29.86	Ā
ATOM	267	C	GLN		31	16.319	5.958	25.008	1.00 17.24	A
ATOM	268	ō	GLN		31	15.655	6.092	26.038	1.00 17.79	A
ATOM	269	N	LEU		32	17.494	5,307	24 987	1.00 15.77	A
ATOM	270	CA	LEU		32	18.070	4.755	26.209	1.00 14.63	A
ATOM	271	CB	LEU		32	19.314	3.932	25.911	1.00 16.13	A
ATOM	272	CG	LEU		32	19.015	2.574	25.275	1.00 18.58	A
ATOM	273		LEU		32	20.291	1.961	24.770	1.00 20.70	A
ATOM	274	CD2			32	18.337	1.698	26.315	1.00 22.17	A
ATOM	275	С	LEU		32	18.449	5.895	27.140	1.00 13.68	A
ATOM	276	ō	LEU		32	18.258	5.774	28.357	1.00 13.31	A.
ATOM	277	N	THR		33	18.980	6.991	26.600	1.00 13.42	A
ATOM	278	CA	THR		33	19.348	8.081	27.500	1.00 12.96	A
ATOM	279	CB	THR		33	20.236	9.134	26.820	1.00 13.48	A
ATOM	280		THR		33	19.530	9.745	25.733	1.00 15.60	A
ATOM	281		THR		33	21.567	8.508	26.358	1.00 15.01	A
ATOM	282	C	THR		33	18.124	8.742	28.117	1.00 13.65	A
ATOM	283	0	THR		33	18.159	9,169	29.285	1.00 12.67	Ā
ATOM	284	N	VAL		34	17.038	8.838	27.345	1.00 13.20	A
ATOM	285	CA	VAL		34	15.804	9.410	27.863	1.00 13.88	A
	202	~~	v 2'344	• •		25.004	J	3		

Figure 7G

ATOM	286	CB	VAL	A	34	14	1.708	9.49	8 26	.773	1.00	14.31	A
MOTA	287	CGl	VAL	Α	34	13	3.380	9.81	1 27	.382	1.00	15.35	A
ATOM	288	CG2	VAL	A	34	15	.096	10.51	7 25	.710	1.00	15.04	A
ATOM	289	С	VAL	A	34	15	3.326	8.52	6 29	.041	1.00	12.55	A
ATOM	290	0	VAL	A	34	14	1.997	9.01	.6 30	.131	1.00	13.43	A
ATOM	291	N	TRP	A	35	15	3.354	7.21		.857	1.00		A
ATOM	292	CA		A	35		.946	6.28		.908		13.11	A
MOTA	293	CB	TRP	A	35		1.988	4.86		.319		14.19	A
ATOM	294	CG	TRP		35		.672	3.78		. 334		15.43	A
ATOM	295	-	TRP	A	35		.610	3.10		.191		15.26	Ā
ATOM	296	CE2			35		.860	2.16		.963		15.57	A
ATOM	297	CE3			35		.990	3.19		. 393		15.49	A
ATOM	298		TRP		35		. 454	3.25		.609	1.00		A
ATOM	299	NE1		A	35		.553	2.28		.572		17.80	A
ATOM	300		TRP		35		.459	1.32		.905		15.31	Ā
ATOM	301	CZ3			35		.600	2.35		.349	1.00		
ATOM	302	CH2		A A	35		.815	1.43		.090	1.00		A A
ATOM	303	Cnz	TRP		35		.869	6.42		.141			
	304	0	TRP		35		.418	5.42				13.13	A
MOTA	305							6.55		.278		12.76	A
MOTA	305	N CA	GLY		36 36		1.176	6.56		893	1.00		A
ATOM										.998		12.50	A
ATOM	307	C	GLY		36		.887	7.93		. 817		11.58	A
ATOM	308	0	GLY		36		.917	7.87		.042	1.00		A
ATOM	309	N	ILE	A	37		.656	9.08		.174	1.00		A
MOTA	310	CA			37		.383	10.30		.884		11.18	A
MOTA	311 312	CB	ILE		37 37		.262	11.43 12.66		.882 .600		11.22	A
ATOM			ILE		37						1.00		A
ATOM ATOM	313 314		ILE		37		.636	11.73 12.56		.281 .955		12.70	A
ATOM	315	CDI	ILE		37		.082	10.10	-	703		13.00	A A
ATOM	315	0	ILE		37		.026	10.52		860		12.24	A
ATOM	317	N	LYS		38		.069	9.46		094		11.84	A
ATOM	318	CA		A	38		.825	9.21		809		13.62	A
ATOM	319	CB	LYS		38		.840	8.51		861		15.00	Ā
ATOM	320	CG	LYS		38		.429	8.43		369			Ā
ATOM	321	CD	LYS		38		.545	7.83		247		20.78	A
ATOM	322	CE	LYS		38		.046	7.95		600		25.34	Ā
ATOM	323	NZ	LYS		38		.721	7.06		722		29.03	A
ATOM	324	C	LYS		38		.060	8.39		083	1.00		A
ATOM	325	0	LYS		38		.490	8.72		163		12.58	A
ATOM	326	N	GLN		39		.916	7 37		001		11.99	A
ATOM	327	CA	GLN		39		.176	6.57		189		11.84	A
ATOM	328	CB	GLN		39		.049	5.33		900	1.00	12.90	Ā
ATOM	329	CG	GLN		39		.580	4.44		757		14.71	A
ATOM	330	CD	GLN		39		.118	4.21		747		17.73	A
ATOM	331	OE1	GLN		39		.596	3.58		669		22.45	A
ATOM	332	NE2	GLN		39		.420	4.70		701		20.02	A
MOTA	333	C	GLN		39		.907	7.37		259		12.24	Ä
MOTA	334	0	GLN		39		.601	7.27		453		12.42	A
ATOM	335	N	LEU		40		.883	8.19		854		10.89	A
MOTA	336	CA	LEU		4.C		.632	8.980		853		11.44	A
ATOM	337	CB	LEU		40		.860	9.648		198	1.00	12.26	A
ATOM	338	CG	LEU		40		.827	8.591		635		12.85	A
MOTA	339	CD1	LEU		40		.007	9.36		066	1.00		A
ATOM	340		LEU		40		.293	7.526		650	1.00	17.91	A
ATOM	341	c	LEU		40		.763	10 040		497	1.00	10.71	A
ATOM	342	0	LEU		40		.848	10.258		701		11.30	A
ATOM	343	N	GLN	А	41		.911	10.693		704		11.62	A
				-	_								

Figure 7H

ATOM	344	CA	GLN A	41	15 038	11.695	38.322	1.00 11.12	A
ATOM	345	CB	GLN A	41	14.241	12.447	37.257	1.00 11.92	A
MCTA	346	CG	GLN A	42	13.250	13.381	37.845	1.00 11.53	A
MOTA	347	CD	GLN A	41	12.280	13.933	36.838	1.00 12.64	A
ATOM	348	OE1	GLN A	41	11.814	13.226	35.962	1.00 13.16	A
MOTA	349	NEZ	GLN A	41	11.972	15.220	36.973	1.00 13.67	A
ATOM	350	C	GLN A	41	14.081	11.031	39.332	1.00 10.98	A
ATOM	351	0	GLN A	41	13.883	11.585	40.404	1.00 12.39	A
ATOM	352	N	ALA A	4.2	13.571	9.845	38.994	1.00 12.53	A
ATOM	353	CA	ALA A	42	12.642	9.185	39.928	1.00 12.08	A
ATOM	354	CB	ALA A	4.3	12.035	7.954	39.295	1.00 13.83	A
ATOM	355	C	ALA A	42	13.383	8.856	41.218	1.00 14.57	A
ATOM	356	0	ALA A	42	12.820	8.975	42.296	1.00 15.73	A
MOTA	357	1/1	ARG A	43	14.647	8.446	41.147	1.00 13.64	A
ATOM	358	CA	ARG A	4.3	15.412	8.150	42.327	1.00 16,22	A
MOTA	359	CB	ARG A	. 43	16.772	7.626	41.852	1.00 18.06	A
ATOM	360	CG	ARG A	4.3	17.706	7.309	42.895	1.00 22.64	A
ATOM	361	CD	ARG A	43	17.232	6.108	43.679	1.00 25.20	A
ATOM	362	NE	ARG A	. 43	18.302	5.922	44.577	1.00 27.65	A
ATOM	363	CZ	ARG A	4.3	18.943	4.798	44.758	1.00 20.75	A
ATOM	364	NHl	ARG A	. 43	18.607	3.666	44.107	1.00 24.75	A
ATOM	365	NH2	ARG A	4.3	19.983	4.899	45.516	1.00 23.93	A
ATOM	366	С	ARG A		15.606	9.411	43.196	1.00 15.07	A
MOTA	367	^o	ARG A	43	15.441	9.372	44.435	1.00 17.46	A
ATOM	368	N	ILE A		15.930	10.529	42.553	1.00 14.44	A
ATOM	369	CA	ILE A	44	16.181	11.794	43.242	1.00 14.63	A
ATOM	370	CB	ILE A		16.801	12.854	42.280	1.00 15.70	A
ATOM	371	CG2	ILE A		16.817	14,226	42.941	1.00 15.89	A
ATOM	372	CG1	ILE A		18.236	12.422	41.940	1.00 16.08	A
ATOM	373	CD1	ILE A	44	18.765	13.127	40.739	1.00 19.48	A
ATOM	374	C	ILE A	44	14.906	12.326	43.887	1.00 16.35	A
ATOM	375	0	ILE A	44	14.984	12.862	44.991	1.00 19.28	A
ATOM	376	N	LEU A	45	13.747	12.150	43.258	1.00 15.72	A
ATOM	377	CA	LEU A	45	12.515	12.682	43.883	1.00 15.80	A
MOTA	378	CB	LEU A	45	11.505	13.032	42.801	1.00 15.66	A
ATOM	379	CG	LEU A	45	11.857	14.181	41.878	1.00 15.35	A
MOTA	380	CDI	LEU A	45	10.793	14.298	40.823	1.00 17.27	A
ATOM	381	CD2	LEU A	45	11.954	15.485	42.701	1.00 18.49	A
ATOM	382	С	LEU A	45	11.903	11.710	44.867	1.00 18.22	A
ATOM	383	0	LEU A	45	11.053	12.187	45.658	1.00 19.14	A
ATOM	384	nT	LEU A	45	12.258	10.488	44.884	1.00 20.39	A
ATOM	385	CA	ACE D	0	10.275	-0.794	28.942	1.00 41.14	В
ATOM	386	С	ACE D	0	11.674	-0.285	28.785	1.00 40.52	₿
ATOM	387	0	ACE D	D	11.905	0.677	28.016	1.00 41.12	В
ATOM	388	N	DLY D	1	12.631	-0.899	29.487	1.00 39.74	В
ATOM	389	CA	DLY D	1	13.997	-0.423	29.356	1.00 37,31	В
MOTA	390	C	DLY D	1	15.200	-1.051	30.044	1.00 35.38	В
ATOM	391	0	DLY D	1	15.133	-2.044	30.785	1.00 35.49	В
ATOM	392	N	DLA D	2	16.332	-0.424	29.752	1.00 33.19	В
ATOM	393	CA	DLA D	2	17.639	-0.797	30.279	1.00 31.99	3
ATOM	394	CB	DLA D	2	18.688	0.196	29.762	1.00 31.34	В
ATOM	395	С	DLA D	2	18,026	-2.217	29.871	1.00 31.71	3
ATOM	396	0	DLA D	2	18,611	-2.982	30.647	1.00 31.67	B
ATOM	397	N	DCS D	3	17.699	-2.577	28.640	1.0C 30.76	2
ATOM	398	CA	DCS D	3	18.061	-3.892	28.159	1.00 31.11	3
MOTA	399	С	DCS D	3	17.104	-4.987	28.618	1.00 31.69	3
MOTA	400	0	DCS D	3	17.531	-6.020	29.111	1.00 31.85	В
MOTA	401	CB	DCS D	3	18.128	-3.876	26.638	1.00 30.00	3

Figure 71

ATOM	402	SG	DCS	D	3	19.502	-2.991	25.840	1.00 30.98	₽
ATOM	403	N	DLU	D	4	15.813	-4.736	28,474	1.00 31.68	В
ATOM	404	CA	DLU		4	14.782	-5.702	28.834	1.00 32.07	В
ATOM	405	CB	DLU		4	13.397	-5.090	28.574	1.00 33.43	В
ATOM	406	CG	DLU		4	13.060	-4.844	27.093	1.00 35.53	В
ATOM	407	CD	DLU		4	13.663	-3.568	26.500	1.00 36.29	B
MOTA	408	OE1	DLU		4	14.422	-2.859	27.182	1.00 37.11	B
ATOM	409	OE2	DLU		4	13.367	-3.264	25.323	1.00 37.45	В
ATOM	410	C	DLU	D	4	14.875	-6.180	30.276	1.00 31.86	B
ATOM	411	0	DLU	D	4	14.832	-7.381	30.553	1.00 32.10	B
ATOM	412	N	DLA	D	5	15.022	-5.237	31.196	1.00 30.98	В
ATOM	413	CA	DLA		5	15.098	-5.566	32.611	1.00 30.61	В
ATOM	414	CB	DLA		5	14.984	-4.296	33.406	1.00 30.83	В
MOTA	415	C	DLA		5	16.362	-6.340	33.008	1.00 30.19	B
	416	٥			5	16.387	-7.044	34.027	1.00 30.60	B
ATOM			DLA							
ATOM	417	N	DRG		6	17.418	-6.202	32.216	1.00 29.09	В
MOTA	418	CA	DRG		б	18.673	-6.893	32,489	1.00 28.71	B
ATOM	419	CB	DRG	D	6	18.480	-8.408	32.369	1.00 31.46	В
ATOM	420	CG	DRG	D	6	18.169	-8.847	30.969	1.00 34.88	В
ATOM	421	CD	DRG	D	6	19.397	-8.762	30.070	1.00 37.42	В
MOTA	422	NE	DRG	D	6	19.715	-7.408	29.607	1.00 40.28	В
ATOM	423	CZ	DRG	D	6	20,121	-7.134	28.370	1.00 40.89	B
ATOM	424		DRG		6	20.248	-8.118	27.481	1.00 42.76	В
MOTA	425		DRG		6	20.409	-5.891	28.015	1.00 42.75	₽ B
					6	19.313	-6.582	33.833	1.00 27.29	
ATOM	426	C	DRG							В
ATOM	427	0	DRG		6	19.994	-7.423	34.421	1.00 27.43	В
ATOM	428	N	DIS		7	19.100	-5.379	34.342	1.00 24.49	B
ATOM	429	CA	DIS		7	19.731	-5.018	35,624	1.00 22.04	В
ATOM	430	CB	DIS	D	7	18.970	-3.888	36.284	1.00 22.68	B
ATOM	431	CG	DIS	D	7	17.655	-4.321	36.854	1.00 22.88	В
MOTA	432	CD2	DIS	D	7	17.178	-5.567	37.104	1.00 24.08	В
ATOM	433	ND1	DIS	D	7	16.650	-3.445	37.187	1.00 25.78	1 B
ATOM	434	CE1	DIS	D	7	15.595	-4.134	37.608	1.00 26,45	3
ATOM	435		DIS		7	15.894	-5.419	37,562	1.00 25.11	B
ATOM	436	C	DIS		7	21.156	-4.636	35.329	1.00 21.84	B
ATOM	437	ō	DIS		7	21.412	-3.743	34.536	1.00 20.32	B
ATOM	438	N	DRG		8	22.091	-5.298	36.003	1.00 20.33	B
MOTA	439	CA	DRG		8	23.494	-5.122	35.778	1.00 19.80	В
ATOM	440	CB	DRG		8	24.284	-5.994	36.755	1.00 20.87	В
ATOM	441	CG	DRG		8	24.175	-7.428	36.459	1.00 26.97	B
MOTA	442	CD	DRG		8	24.743	-8.207	37.631	1.00 29.07	В
ATOM	443	NE	DRG	D	8	24.581	-9.603	37.325	1.00 31.54	В
ATOM	444	CZ	DRG	D	8	25.258	-10.189	36.352	1.00 31.94	В
MOTA	445	NHl	DRG	D	8	26,139	-9.485	35.658	1.00 33.88	В
ATOM	446	NH2	DRG	D	8	24.987	-11.432	36.027	1.00 33.88	В
ATOM	447	С	DRG		8	23.985	-3.711	35.873	1.00 17.95	В
ATOM	448	Õ	DRG		8	24.856	-3.361	35.124	1.00 17.42	B
ATOM	449	И	DLU		9	23.407	-2.934	36.783	1.00 16.93	В
ATOM	450	CA	DLU		9	23.900	-1.578	36.951	1.00 15.49	B
					9	23.358				
ATOM	451	CB	DLU				-0.954	38.261	1.00 16.03	B
ATOM	452	CG	DLU		9	21.876	-0.552	38.323	1.00 16.75	В
ATOM	453	CD	ĎΓΩ		9	20.996	-1.816	38.786	1.00 16.82	В
ATOM	454	OE1	DLU	D	9	21.407	-2.982	38.584	1.00 19.63	B
ATOM	455	OE2	DLU	D	9	19.933	-1.498	39.310	1.00 20.12	B
ATOM	456	C	DLU	D	9	23.601	-0.717	35.747	1.00 15.97	В
ATOM	457	0	DLU	D	٠ 9	24.142	0.383	35.655	1.00 15.24	B
ATOM	458	N	DRP	D	10	22.747	-1.186	34.844	1.00 15.66	В
ATOM	459	CA	DRP		10	22.462	-0.435	33.611	1.00 15.31	В
				_						

Figure 7J

ATOM	460	CE	DRP		10	20 960			1.00 16.05	В
ATOM	461	CG	DRP	D	10	20.354	0.793	1 34.410	1.00 15.28	B
ATOM	462	CD2	DRP	D	10	20.504	2.200	34.384	1.00 15.28	£
MOTA	463	CE2	DRP	D	10	19.734	2.730	35.424	1.00 15.74	В
MOTA	464	CE3	DRP	D	10	21.237	3.075	33.563	1.00 15.47	В
ATOM	465	CD1	DRP	D	10	19.504	0.512	35.449	1.00 16.40	В
ATOM	466	NE1	DRP	D	10	19.122	1.676		1.00 17.22	B
ATOM	457	CZ2	DRP		10	19.650	4.107		1.00 15.81	B
ATOM	468	CZ3	DRP		10	21.174	4.444		1.00 14.93	B
MOTA	469	CH2	DRP	ם	10	20.382	4.935		1.00 15.26	В
ATOM	470	C	DRP		10	23.000			1.00 17.32	В
ATOM	471	ō	DRP		10	22.790	-0.682		1.00 16.59	В
ATOM	472	N	DLA		11	23,744	-2.227		1.00 17.72	В
ATOM	473	CA	DLA		11	24.253	-2.940			
ATOM	474	CB	DLA		11	25.034	-4.168		1.00 18.88	В
ATOM	475									В
ATOM	476	C	DLA		11	25.126	-2.074		1.00 18.95	B
	477	0	DLA		11	25.078	-2.221		1.00 21.13	В
ATOM		N	DRP		12	25.884	-1.142		1.00 17.86	В
ATOM	478	CA	DRP		12	26.759	-0.275		1.00 17.72	B
ATOM	479	CB	DRP		12	27.586	0.645		1.00 18.43	B
ATOM	480	CG	DRP		12	26.725	1.588		1.00 16.68	В
ATOM	481		DRP		12	26.285	2.900		1.00 16.49	B
MOTA	482	CE2	DRP		12	25.459	3.371		1.00 15.68	E
ATOM	483	CE3	DRP		12	26.519	3.714		1.00 17.14	B
ATOM	484		DRP		12	26.177	1.335		1.00 15.60	В
ATOM	485	NE1	DRP		12	25.402	2.400	33.668	1.00 15.74	В
ATOM	486	CZ2		D	12	24.842	4.628		1.00 15.78	B
ATOM	487	CZ3			12	25.904	4.977	30.525	1.00 17.42	B
ATOM	488		DRP		12	25.090	5.406	31.550	1.00 16.81	В
ATOM	489	C	DRP		12	25.913	0.577	29.346	1.00 18.81	В
ATOM	490	С	DRP	D	12	26.347	0.870	28.231	1.00 20.05	B
ATOM	491	N	DEU	D	13	24.740	1.020	29.790	1.00 17.43	В
ATOM	492	CA	DEU	D	13	23.915	1.866	28.926	1.00 17.59	₿
ATOM	493	CB	DEU	D	1.3	22.883	2.647	29.756	1.00 15.97	В
ATOM	494	CG	DEU	D	13	21.857	3.489	28.971	1.00 15.31	B
MOTA	495	CD1	DEU	D	13	22.559	4.585	28.204	1.00 15.99	В
ATOM	496	CD2	DEU	\supset	13	20.886	4.105	29.938	1.00 16.07	B
ATOM	497	C	DEU	D	13	23.265	1.011	27.847	1.00 19.32	B
ATOM	498	0	DEU	D	13	23.224	1.429	26.702	1.00 20.12	В
ATOM	499	N	DCS	D	14	22.775	-0.180	28.199	1.00 20.93	В
ATOM	500	CA	DCS	D	24	22.190	-1.046	27.196	1.00 22.79	В
ATOM	501	C	DCS	D	14	23.272	-1.329	26.124	1.00 22.54	В
ATOM	502	Q	DCS	D	14	22.963	-1.318	24.916	1.00 23.67	В
ATOM	503	CB	DCS	D	14	21.675	-2.319	27.874	1.00 23.47	В
ATOM	504	\$G	DCS	D	14	21.216	-3.669	26.732	1.00 27.91	В
ATOM	505	N	DLA	D	15	24.514	-1.568	26.533	1.00 22.47	В
ATOM	506	CA	DLA		15	25,627	-1.857	25.614	1.00 23.31	В
ATOM	507		DLA		15	26.868	-2.302	26.401	1.00 24.09	В
ATOM	508	C	DLA		15	25.987	-0.672	24.717	1.00 24.16	B
MOTA	509		DLA		15	26.511	-0.844	23.614	1.00 25.93	B
ATOM	510		DLA		16	25.723	0.544	25.192	1.00 22.60	B
ATOM	511		DLA		16	26.017	1.743	24.400	1.00 22.10	
ATOM	512		DLA		16	26.006	2.985	25.314	1.00 22.10	В
atom Atom	513		DLA		16	24.995	1.932	23.278	1.00 22.02	B B
ATOM ATOM	514		DLA		16	25.355	2.570	22.256		
	515	NT							1.00 22.36	В
ATOM			DLA		16	23.843	1.460	23.410	1.00 23.47	B
ATOM ATOM	516 517	CL-1 OH2	CL WAT	I St	1	20.914	12.075	1.899	1.00 45.04	I
MI ON	221	Off	VV 2-2-2-	νų	-	23.911	0.404	-21.684	1.00 53.50	M

Figure 7K

ATOM ATOM ATOM ATOM ATOM ATOM ATOM ATOM	518 519 520 521 522 523 524 525 526	OH2 WAT W	2 3 4 5 6 7 8	30.822 30.369 27.699 23.417 24.012 16.572	13.971 12.875	-19.357 -17.693 -16.588 -13.168	1.00 52.17 1.00 37.33 1.00 46.63 1.00 48.41	W W W
ATOM ATOM ATOM ATOM ATOM ATOM ATOM ATOM	520 521 522 523 524 525 526 527	OH2 WAT WOH2 WAT WOH2 WAT WOH2 WAT WOH2 WAT W	4 5 6 7	27.699 23.417 24.012	12.875 1.727	-16.588 -13.168	1.00 46.63	W
ATOM ATOM ATOM ATOM ATOM ATOM ATOM ATOM	521 522 523 524 525 526 527	OH2 WAT W OH2 WAT W OH2 WAT W OH2 WAT W	5 6 7	23.417 24.012	1.727	-13.168	-	
ATOM ATOM ATOM ATOM ATOM ATOM ATOM ATOM	522 523 524 525 526 527	OH2 WAT W OH2 WAT W OH2 WAT W	6 7	24.012			1.00 48.41	W
ATOM ATOM ATOM ATOM ATOM ATOM	523 524 525 526 527	OH2 WAT W	7		1.407			
ATOM ATOM ATOM ATOM ATOM ATOM	524 525 526 527	OH2 WAT W		3.6 572		-16.007	1.00 58.65	W
MOTA MOTA MOTA MOTA MOTA	525 526 527		8	10.012	3.069	-7.418	1.00 36.12	W
ATOM ATOM ATOM ATOM	526 527	OH2 WAT W		32.381	11.028	-8.334	1.00 55.01	W
ATOM ATOM ATOM	527		9	33.753	7.275	-10,261	1.00 53.14	W
ATOM ATOM		OHO WAT W	10	20.318	-0.862	-12.067	1.00 28.89	W
ATOM	*	OH2 WAT W	11	26.434	1.459	-10.129	1.00 43.04	W
	528	OH2 WAT W	12	27.878	0.323	-12.146	1.00 55.95	W
	529	OH2 WAT W	13	31.427	0.259	-10.741	1.00 52.47	W
	530	OH2 WAT W	14	29.889	8.411	-6.889	1.00 56.49	W
ATOM	531	OH2 WAT W	15	22.532	1.843	-4.021	1.00 32.19	W
ATOM	532	OH2 WAT W	16	23.814	-0.534	-4.336	1.00 39.56	W
ATOM	533	OH2 WAT W	17	19.996	1.598	-5.292	1.00 33.28	W
ATOM	534	OH2 WAT W	18	25.262	-3.040	-8.386	1.00 28.37	W
ATOM	535	OH2 WAT W	19	22,556	0.000	0.001	1.00 30.95	W
ATOM	536	OH2 WAT W	20	24.369	-1.421	-1.823	1.00 29.32	W
ATOM	537	OH2 WAT W	21	29.134	-0.583	-6.291	1.00 46.18	W
ATOM	538	OHO WAT W	22	27.394	2.286	-5.533	1.00 43.67	W
MOTA	539	OH2 WAT W	23	26.774	0.049	-4.387	1.00 45.47	W
ATOM	540	OH2 WAT W	24	30.008	5.236	1.507	1.00 52.80	W
MOTA	541	OH2 WAT W	25	27.776	4.560	0.356	1.00 42.94	M
MOTA	542	OH2 WAT W	26	32.018	6.237	0.261	1.00 53.15	W
ATOM	543	OH2 WAT W	28	18.650	4.426	-0.423	1.00 34.71	W
ATCM	544	OH2 WAT W	29	18.919	1.842	-1.284	1.00 42.23	M
ATOM	545	OH2 WAT W	30	11.826	6.239	7.700	1.00 59.49	W
MOTA	546	OH2 WAT W	31	13.683	5.469	2.919	1.00 52.76	W
ATOM	547	OH2 WAT W	32	16.956	4.594	1.380	1.00 47.84	W
ATOM	548	OH2 WAT W	33	17.260	2.099	7.679	1.00 46.32	W
ATOM	549	OH2 WAT W	34	17.636	1.737	-4.073	1.00 51.94	W
ATOM	550	OH2 WAT W	35	16.221	5.835	9.764	1.00 30.19	W
ATOM	551	OH2 WAT W	36	26.030	8.926	8.979	1.00 51.32	W
ATOM	552	OH2 WAT W	37	13.758	2.898	9.624	1.00 52.05	W
ATOM	553	OH2 WAT W	38	14.899	5.914	11.925	1.00 35.86	W
ATOM	554	OH2 WAT W	39	19.841	0.030	14.724	1.00 45.90	W
ATOM	555	OH2 WAT W	40	13.772	2.335	12.179	1.00 50.60	W
ATOM	556	OH2 WAT W	41	13.367	0.805	6.229	1.00 51.80	W
ATOM	557	OH2 WAT W	42	15.587	3.501	15.845	1.00 30.05	W
ATOM	558	OH2 WAT W	43	14.280	4.098	13.819	1.00 48.74	W
ATOM	559	OH2 WAT W	44	14.273	3.983	18.042	1.00 32.52	W
ATOM	560	OH2 WAT W	45	14.275	2.720	20.720	1.00 40.19	W
ATOM	561	OHI WAT W	46	21.969	2.228	18.885	1.00 22.32	W
ATOM	562	OH2 WAT W	47	21.588	1.778	21.594	1 00 28.43	W
MOTA	563	OH2 WAT W	48	11.908	3.300	22.023	1.00 50.50	W
MOTA	564	OH2 WAT W	49	13.679	0.626	18.643	1.00 46.64	W
MOTA	565	OH2 WAT W	50	16.369	2.196	22.597	1.00 30.08	W
MOTA	566	OH2 WAT W	51	12.828	6.527	18.634	1.00 37.29	W
ATOM	567	OH2 WAT W	52	24.603	2.631	19.581	1.00 25.55	
MOTA	568	OH2 WAT W	53	11.867	0.791	23.131	1.00 28.35	W
MOTA	569	OH2 WAT W	54	24.546	5.366	17.812	1.00 50.24	W
ATOM	570	W TAW CHO	55	20.954	0.091	17.131	1.00 49.14	
ATOM	571	OHL WAT W	56	19.747	-0.562	21.394	1.00 49.14	M
	572		57	19.747	-0.56∠ 8.442	21.394 19.922	1.00 36.92	W
ATOM ATOM	572 573	OH2 WAT W OH2 WAT W	58	10.854	5.349	19.922	1.00 45.89	
								W
ATOM	574		59	10.710	9.378	19.376	1.00 37.52	W
ATOM	575	OH2 WAT W	60	10.497	10.303	21.845	1.00 34.96	M

Figure 7L

ATOM	576	OH2 WAT W 61	12.866	5.691	26.354	1 00 28.86	W
A \underline{m} O \underline{M}	577	OH2 WAT W 62	10.758	7.878	25.495	1.00 42.32	W
ATOM	578	OH2 WAT W 53	11.782	6.555	28.773	1.00 29.65	W
ATOM	579	OHZ WAT W 64	10.396	8.472	27.988	1.00 37.31	W
ATOM	580	OH2 WAT W 65	13.316	2.342	26.849	1.00 43.22	W
ATOM	581	OHI WAT W 66	29.863	-1.693	28.654	1.00 38.41	W
ATOM	582	OH2 WAT W 67	15.468	-1.186	26.444	1.00 32.71	W
ATOM	583	OH2 WAT W 68	20.934	12.065	25.212	1.00 18.68	W
ATOM	584	OH2 WAT W 69	7.101	5.989	26.485	1.00 48.02	W
ATOM	585	OH2 WAT W 70	7.226	10.744	27.574	1.00 33.30	W
ATOM	586	OH2 WAT W 71	16.382	-1.374	34.997	1.00 34.36	W
ATOM	587	OH2 WAT W 72	17.474	-0.717	38.167	1.00 28.82	W
ATOM	588	OH2 WAT W 73	17.984	-2,951	33.186	1.00 27.39	W
ATOM	589	OH2 WAT W 74	16.999	1.929	37.830	1.00 37.09	w
ATOM	590	OH2 WAT W 75	20.595	3.071	39.121	1.00 19.51	W
ATOM	591	OH2 WAT W 76	14.326	5.004	39.584	1.00 20.31	W
ATOM	592	OH2 WAT W 77	11.973	4.544	38.034	1.00 32.93	w
ATOM	593	OH2 WAT W 78	18.317	4.417	39.397	1.00 44.00	W
MOTA	594	OH2 WAT W 79	10.983	-2.804	30.948	1.00 52.39	W
ATOM	595	OH2 WAT W 80	11.064	0.945	32.640	1.00 30.78	W
ATOM	596	OH2 WAT W 81	12.861	0.902	39.566	1.00 51.74	W
ATOM	597	OH2 WAT W 82	14.353	-1.379	39.210	1.00 48.06	W
ATOM	598	OH2 WAT W 83	13.014	-3.417	36.263	1.00 46.54	W
ATOM	599	OH2 WAT W 84	11.101	-2.319	39.669	1.00 61.24	W
ATOM	600	OH2 WAT W 85	20.879	-3.825	31.838	1.00 26.25	W
ATOM	601	OH2 WAT W 86	24.470	-4.753	28.192	1.00 36.86	W
ATOM	602	OH2 WAT W 87	22.117	-5.700	29.831	1.00 38.03	W
ATOM	603	OH2 WAT W 88	19.685	0.721	41.041	1.00 28.21	W
ATOM	604	OH2 WAT W 89	20.274	5.127	40.337	1.00 32.29	W
ATOM	605	OHO WAT W 90	10.072	4.538	29,943	1.00 33 10	W
ATOM	606	OH2 WAT W 91	10.573	4.216	33.496	1.00 33.22	M
ATOM	607	OHI WAT W 92	10.336	5.922	36.364	1.00 48.48	W
MOTA	608	OH2 WAT W 93	9.113	5.209	40.332	1.00 51.71	W
ATOM	609	OH2 WAT W 94	9.980	8.713	42.573	1.00 24.98	W
ATOM	610	OH2 WAT W 95	17.708	6.542	-1.798	1.00 36.93	W
MOTA	611	OH2 WAT W 96	10.278	11.397	38.730	1.00 17.13	W
ATOM	612	OH2 WAT W 97	11.290	10.478	36.184	1.00 15.62	W
ATOM	613	OH2 WAT W 98	8.444	12.988	37.395	1.00 17.25	W
ATOM	514	OHO WAT W 99	8.735	9.911	40.361	1.00 25.18	W
ATOM	615	OH2 WAT W 100	6.665	11.917	35.865	1.00 28.95	W
MOTA	616	OH2 WAT W 101	8.907	9.736	35.113	1.00 28.77	W
ATOM	617	OH2 WAT W 102	10.416	5.919	42.300	1.00 32.80	W
ATOM	618	OH2 WAT W 103	8.278	3.600	38.536	1.00 54.85	W
ATOM	619	OHO WAT W 104	14.183	7.249	45.734	1.00 23.53	W
ATOM	620	CH2 WAT W 105	11.426	7.965	46.547	1.00 34.68	W
MOTA	621	OH2 WAT W 106	16.907	2.218	41.970	1.00 39.50	W
ATOM	622	OH2 WAT W 107	16.479	14.336	46.761	1.00 23.72	W
ATOM	623	OH2 WAT W 108	8.319	12.931	45.022	1.00 22.11	W
ATOM	624	OHI WAT W 109	7.189	12.423	42.385	1.00 39.34	W
ATOM	625	OH2 WAT W 110	8.599	9.769	44.603	1.00 40.15	W
ATOM	626	OH2 WAT W 111	26.891	-1.858	33.829	1.00 23.69	W
ATOM	627	OH2 WAT W 112	28.775	-3.310	32.521	1.00 38.13	W
MOTA	628	OH2 WAT W 113	31.335	0.587	33.068	1.00 34.37	W
ATOM	629	OH2 WAT W 114	30.921	-0.919	36.513	1.00 44.24	W
ATOM	630	OH2 WAT W 115	30.098	2.733	29.619	1.00 39.50	W
MOTA	631	OH2 WAT W 116	33.465	2.665	34.521	1.00 52.27	W
ATOM	632	OH2 WAT W 117	25.612	14.159		1.00 56.10	W
ATOM	633	OH2 WAT W 118	33.904	2.165	-15.960	1.00 57.70	W

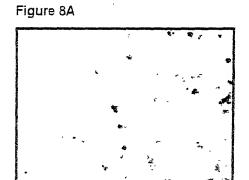
Figure 7M

Docket/App No.: 0399.1192-008
Title: Inhibitors of HIV Membrane Fusion

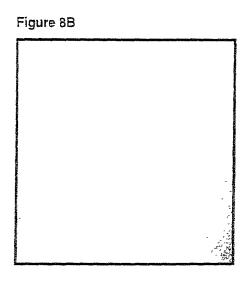
Debra M. Eckert, et al. Inventors:

AΤ	OM 63	34 OH2	∇A	W	119	33	.766	4	.315	-14.106	1.00	57.44	W
AΤ	OM 63	35 OH2	WAT	W	120		.831	7	.497	7.075	1.00	40.38	W
AT	OM 6:	36 OH2	TAW	V	121	26	.562	8	.206	4.240	1.00	32.00	W
AT	OM 63	37 OH2	WAT	W	122	29	.081	7	.039	3.251	1.00	46.30	W
ΑT	OM 6:	38 OH2	WAT	W	123	22	.080	-0	.975	10.516	1.00	39.31	W
ĄŢ	OM 60	39 OH2	WAT	M	124	28	.185	3	.991	13.044	1.00	45.28	W
ΥA	OM 64	40 OH2	WAT	M	125	29	.400	7	.324	10.996	1.00	52.21	W
AT	OM 64	41 OH2	WAT	W	126	12	.966	3	.595	24.673	1.00	59.42	W
AT	OM 64	42 OH2	WAT	W	127	8	.932	7	.961	36.476	1.00	45.85	W
AT	OM 64	13 OH2	TAW	W	128	12.	712	5	.206	41.719	1.00	38.55	W
AT	OM 64	44 OH2	WAT	W	129	9.	.431	10	.564	47.230	1.00	35.27	W
AT		15 OH2	WAT	W	130	6.	643	9	.576	45.596	1.00	44.00	M
AT	OM 64	16 OH2	WAT	W	131	21.	.501	13	. 657	45.856	1.00	43.49	W
AT	OM 64	17 OH2	WAT	W	132	19.	368	14	.112	46.567	1.00	41.15	W
AT			WAT	W	133	20.	913	12	.058	48.230	1.00	36.86	W
AT			WAT	W	134	13.	.556	4	.967	44.137	1.00	49.55	W
AT			WAT	W	135	17.	. 568	0	.000	0.010	1.00	54.94	W
AT			TAW	W	136	17.	847	-C	.139	11.093	1.00	42.03	M
AT			WAT	W	137		734		.074	15.641	1.00	35.36	W
AT	OM 65	3 OH2	WAT	W	138	8.	107	7	.930	38.831	1.00	37.47	W
AT			WAT	W	139	10.	614	4	.603	44.378	1.00	61.10	W
ATO			WAT	W	140	14.	180	-9	.552	32.610	1.00	37.66	M
AT			WAT	W	141	26.	549	-4	.072	22.858	1.00	48.05	W
AT(TAW	₩	142		688	-2	.141	22.847	1.00	36.75	W
AT(WAT	W	143		457		.462	27.799	1.00	38.11	W
ATO			TAW		144		956		.356	45.521	1.00	36.93	M
AT			WAT	W	145		655		. 938	40.183	1.00	40.77	W
AT				W	146		688		.613	19.777		47.04	W
ATO				W	147		880		627	28.327	1.00	44.89	W
TA			WAT	W	148		682		605	33.707		43.34	W
ATO			WAT	W	149		220			-23.836		53.67	W
PLA				W	150		905		222	-7.774		44.54	W
ATO		6 OH2	WAT	W	151	15.	403	-11.	541	32.995	1.00	47.59	W
TE													
ENI)												

Inhibition of HIV-1 Membrane Fusion by a D-Peptide



Syncytia Assay with no D-peptide



Syncytia Assay with [100 µM] peptide

Docket/App No.: 0399.1192-008 Title: Inhibitors of HIV Membrane Fusion

Inventors:

Debra M. Eckert, et al.

NMR Characterization of Aromatic Residues in **IQN17/D-Peptide Complexes**

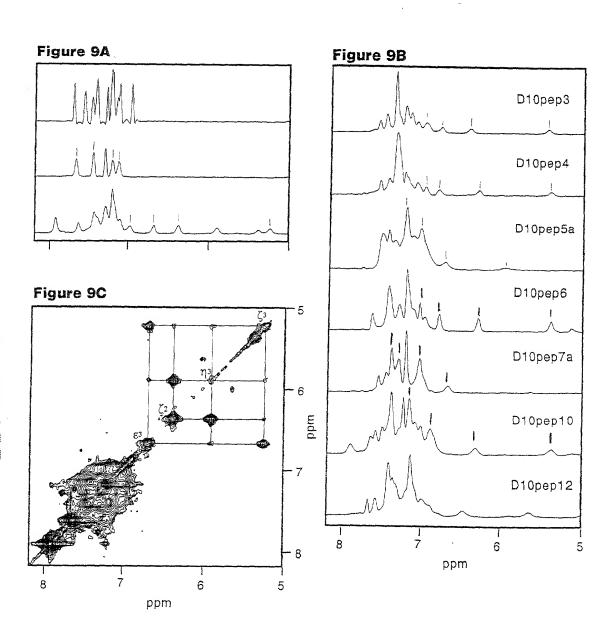
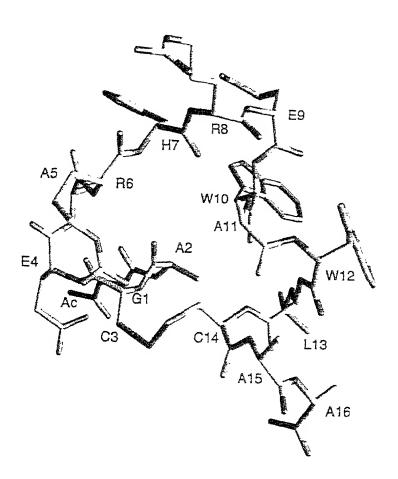


Figure 10: Conformation of D10pep1 in complex with IQN17



Docket/App No.: 0399.1192-008
Title: Inhibitors of HIV Membrane Fusion

Inventors: Debra M. Eckert, et al.

CRYST1	57.	935		. 953				90.00			1
ORIGX1			0000		000000	0.00000		0.00000			
ORIGX2		0.00	0000	1.	.000000	0.00000	00	0.00000)		
ORIGX3		0.00	0000	0.	.000000	1.00000	0	0.00000)		
SCALE1		0.01	7261	0.	000000	0.00000	0	0,0000)		
SCALE2		0.00	0000	Q.	008199	0.00000	10	0.00000)		
SCALE3		0.00	0000	0.	000000	0.01357	4	0.00000)		
MOTA	1	CA	ACE	A	0	25.795	17.140	37.286	1.00	61.88	A
ATOM	2	С	ACE	Ą	0	25.799	18.376	36.435	1.00	62.00	A
ATOM	3	0	ACE	A	0	25.500	19.475	36.921	1.00	62.10	A
ATOM	4	N	ARG		1	26.134	18.217	35.157	1.00	60.34	A
ATOM	5	CA	ARG	A	1	26,203	19.328	34.217	1.00	60.56	A
ATOM	б	CB	ARG	A	1	27.212	18.993	33.110	1.00	61.87	A
ATOM	7	CG	ARG	A	1	27.630	20.135	32.212	1.00	60.78	A
ATOM	8	CD	ARG	A	1	28.500	19,587	31.097		64.25	A
ATOM	9	NE	ARG		1	29.018	20,628	30.217		65.07	A
ATOM	10	CZ	ARG		1.	29.706	20.377	29.109		63.90	A
ATOM	11	NH1			1	29.951	19.124	28.766		64.20	A
ATOM	12	NH2			1	30.157	21.367	28.351		63.51	A
ATOM	13	C	ARG		1	24.823	19.573	33.595		59.45	A
ATOM	14	ō	ARG		1	24.453	20.714	33.294		57.69	A
ATOM	15	N	MET			24.065	18.494	33.425		57.60	A
ATOM	16	CA	MET		2	22.736	18.573	32.836		59.85	A
ATOM	17	CB	MET		2	22.73	17.198	32.397		59.35	A
ATOM	18	CG	MET		2	21.204	17.251	31.342		63.56	A
ATOM	19	SD	MET		2	20.044	15.905	31.454		67.77	A A
ATOM	20	CE	MET		2	19.089	16.438	32.857		66.61	A
ATOM	21	C	MET		2	21.723	19.130			61.33	
			MET					33.834			A
ATOM	22	0			2	20.543	19.276	33.521		59.97 62.71	A
ATOM	23	N	LYS		3	22.200	19.417	35.041			A
ATOM	24	CA	LYS		3	21.373	19.961	36.107		63.07	A
ATOM	25	CB	LYS		3	21.817	19.361	37.449		64.25	A
ATOM	26	CG	LYS		3	20.982	19.721	38.687		54.89	A
ATOM	27	CD	LYS		3	21.195	21.159	39.160		64.67	A
ATOM	28	CE	LYS		3	20.543	21.405	40.525		64.66	A
ATOM	29	NZ	LYS		3 3	19.077	21.123	40.548		63.04	A
ATOM	30	C	LYS			21.599	21.467	36.062		64.55	A
ATOM	31	0	LYS		3	20.639	22.245	36.032		64.65	A
ATOM	32	71	GLN		4	22.869	21.873	36.036		64.34	A
ATOM	33	CA	GLN		4	23.232	23.289	35.952		65.46	A
ATOM	34	CB	GLN		4	24.746	23.447	35.780		67.71	Ā
ATOM	35	CG	GLN		4	25.552	22.954	36.963		71.16	A
ATOM	36	CD	GLN		4	25.297	23.771	38.212		75.18	A
ATOM	37		GLN		4	25.618	24.962	38.269		77.70	Ą
ATOM	38		GLN		4	24.706	23.135	39.225		76.77	A
MOTA	39	C	GLN		4	22.508	23.928	34.758		64.11	A
ATOM	40	0	GLN		4	22.191	25.128	34.776		62.08	A
ATOM	41	N	ILE		5	22.260	23.120	33.726		59.80	A
MOTA	42	CA			5		23.587				Ą
ATOM	43	СЗ	ILE		5	21.567	22.558	31.398		56.85	A
ATOM	44		ILE		5	20.438	22.851	30.416		53.92	¥
ATOM	45		ILE		5	22.942	22.562	30.719		56.47	A
MOTA	46		ILE		5	23.079	21.524	29.514		59.50	A
ATOM	47	С	ILE		5	20.083	23.828	32.929		58.98	A
ATOM	-18	٥	ILE		5	19.575	24.928	32.729		58.48	A
ATCM	19	М	GLU		6	19.424	22.796	33.472		59.29	Α
ATOM	50	CA	$\mathtt{G}\mathbf{L}\mathtt{J}$		5	18.013	22.883	33.377		56.51	A
ATCM	51	CB	GLU	¥	ô	17.528	21.537	34.448	1.00	55.59	A

Figure 11A

ATOM	52	CG	GLU	A	6	17.	638	20.359	33.	480	1.00	56.46	A
ATOM	53	$\mathbb{C}\mathbb{D}$	GLU	A	6	17.3		19.009	34.	119	1.00	56.33	A
ATOM	54	0E1	GLU	A	б	17.	702	18.790	35.	278	1.00	53.43	A
ATOM	55	OE2	GLU	À	6	16.	644	18.157	33	458	1.00	55.03	A
MOTA	56	С	GLU	A	6	17.	873	23.977	34.	926	1.00	54.87	A
MOTA	57	0	GLU		6	16.	793	24.509	35.	137	1.00	52.82	A
MOTA	58	N	ASP	A	7	18.	986	24.300		572	1.00	55.62	A
ATOM	59	CA	ASP	A	7	19.0	039	25.336	36.	597	1.00	56.65	A
ATOM	60	CB	ASP	A	7	20,	291	25.162		451	1.00	57.46	A
ATOM	61	CG	ASP		7	20.		24.471		762	1.00		A
ATOM	62	OD1			7	19.		23.534		775		53.78	A
ATOM	63	OD2			7	20.		24.862		771		57.66	A
ATOM	64	С	ASP		7	19.0		26.745		041		56.99	A
ATOM	65	0	ASP		7	18.		27.662		678		55.43	A
MOTA	66	N	LYS		8	19.		26.945	34.		1.00		A
MOTA	67	CA	LYS		8	19.		28.290	34.		1.00		A
MOTA	68	CB	LYS		8	20.9		28.599		612		62 61	A
ATOM	69 30	CG	LYS		8	22.2		28.372	34.			66.85	A
ATOM	70 71	CD	LYS		8 8	23.3		29.498 30.576	35.	357	1.00		A
ATOM ATOM	72	CE NZ	LYS		8	21.5		31.323	35.			72.00 72.05	A A
ATOM	73	C	LYS		8	18,		28.481	33.		1.00		A
ATOM	74	0	LYS		8	18.		29.609	32.		1.00	56.44	A A
ATOM	75	N	ILE		9	17.8		27.376	32.		1.00	55.29	A
MOTA	76	CA	ILE		9	16.6		27.436	32.		1.00	56.69	A
ATOM	77	CB	ILE		9	16.3		26.052	31.		1.00	54.89	A
ATOM	78	CG2	ILE		9	14.8		26.067	30.			54.20	A
ATOM	79	CG1	ILE		9	17.3		25.676	30.			55.96	A
ATOM	80	CD1	ILE		9	17.3		24.339	29.			54.22	A
ATOM	81	C	ILE		9	15.5		27.876	33.			57.98	A
ATOM	82	Ō	ILE		9	14.6		28.572	32.			55.85	A
ATOM	83	N	GLU	A	10	15.6	526	27.458	34.	271	1.00	59.96	A
ATOM	84	CA	GLU	Α	10	14.6	541	27.788	35.	283	1.00	61.12	A
ATOM	85	CB	GLU	Α	10	14.8	350	26.901	36.	510	1.00	63.01	A
ATOM	86	CG	GLU	Α	10	13.8	346	27.117	37.	618	1.00	66.89	A
MOTA	87	CD	GLU	Α	10	14.3	387	26.672	38.	955	1.00	68.37	A
MOTA	88	OEl	GLU	А	10	14.8		25.510	39.		1.00	67.70	A
MOTA	89	0E2	GLU	А	10	14.3	355	27.487	39.	903	1.00	68.42	A
ATOM	90	C	GLU		10	14.8		29.243	35.			59.41	A
ATOM	91	0	GLU		1.0	13.9		29.958	36.			59.95	A
ATOM	92	N	GLU		11	16.1		29.663	35.			57.16	A
ATOM	93	CA	GLU		11	16.5		31.024	35.			55.88	A
ATOM	94	CB	GLU		11	18.0		31.095	36.			58.17	A
ATOM	95 96	CG	GLU		11	18.5		32.375	36.			62.73	A.
ATOM	96 97	CD OE1	GLU		11	18.4 19.1		32.382	38.			67.75	A
ATOM ATOM	98	OEI	GLU		11 11	17.7		31.512 33.249	38.			67.91 68.84	A
ATOM	99	C	GLU		11	16.0		31.976	34.			54.76	A A
ATOM	100	0	GLU		11	15.8		33.160	35.			54.78	A
ATOM	101	N	ILE		12	15.9		31 443	33.5			52.61	A
ATOM	102	CA	ILE		12	15.5		32.210	32.4			50.09	Ā
ATOM	103	CB	ILE		12	16.0		31.548	31.			50.23	A
ATOM	104	CG2	ILE		12	15.2		32.073	29.			48.54	Ā
ATOM	105	CG1	ILE		12	17.5		31.773	30.			50.30	A
ATOM	106	CD1	ILE		12	18.1		31.062	29.			53.10	A
ATOM	107	С	ILE		12	13.9		32.324	32.3			49.83	A
MOTA	108	0	ILE		12	13.4		33.376	32.0		1.00	47.70	A
MCTA	109	N	GLU		13	13.3		31.232	32.6	698	1.00	48.57	A
MOTA	110	CA	GLU	A	13	11.8		31.218	32.			48.22	A
ATOM	111	CB	GLU	A	13	11.3	20	29.810	32.5	254	1.00	45.44	A

Figure 11B

ATOM	112	CG	GLU A	13	11.673	28.794	31.895	1.00 46.65	A
ATOM	113	CD	GLU A	13	11.419	27.372	32.358	1.00 49.90	A
ATOM	114	OE1			12.051	26.968			
							33.366	1.00 49.96	A
ATOM	115	OE3	GLU A	1 13	10.599	26.665	31.720	1.00 50.18	A
ATOM	116	C	GLU A	13	11.357	32.163	33.749	1.00 47.83	A
MOTA	117	0	GLU A	13	10.279	32.731	33.638	1.00 48.72	A
MOTA	118	N	SER A		12.168	32.313	34.786	1.00 48.67	A
ATOM	119	CA	SER A	14	11.862	33.187	35.907	1.00 49.89	A
ATOM	120	CB	SER A	14	12.906	32.985	37.C14	1.00 49.05	A
ATOM	121	OG	SER A		12.634	33.773	38.160	1.00 49.35	
									A
ATOM	122	C	SER A		11.885	34.527	35.415	1.00 50.52	A
ATOM	123	0	SER A	14	10.869	35.313	35.431	1.00 54.15	A
ATOM	124	N	LYS A	15	13.056	35.067	34.971	1.00 49.27	A
ATOM	125	CA	LYS A		13.248	36.416	34.474	1.00 51.02	
									A
ATOM	126	CB	LYS A		14.707	36.589	34.042	1.00 54.30	A
MOTA	127	CG	LYS A	15	15.018	37.931	33.417	1.00 58.79	A
ATOM	128	CD	LYS A	15	14.843	39.039	34.437	1.00 63.42	A
ATOM	129	CE	LYS A		15.841	38.880	35.576	1.00 65.66	A
MOTA	130	NZ	LYS A		15.722	39.983	36.569	1.00 68.14	A
ATOM	131	C	LYS A	15	12.313	36.758	33.305	1.00 50.99	A
ATOM	132	0	LYS A	. 15	12.022	37.926	33.061	1.00 49.62	A
ATOM	133	N	GLN A	16	11.848	35.740	32.587	1.00 50.06	
									A
ATOM	134	CA	GLN A		10.965	35.937	31.444	1.00 49.96	A
ATOM	135	CB	GLN A	. 16	10.950	34.584	30.570	1.00 49.89	A
ATOM	136	CG	GLN A	. 16	10.133	34.810	29.286	1.00 50.59	A
ATOM	137	CD	GLN A	. 16	10.287	33.603	28.369	1.00 54.27	A
		OE1					28.667		
ATOM	138				9.799	32.511		1.00 56.28	A
ATOM	139	NE2	GLN A	. 16	10.985	33.796	27.250	1.00 54.69	A
ATOM	140	C	GLN A	. 16	9.551	36.256	31.899	1.00 50.61	A
MOTA	141	0	GLN A	. 16	8.788	36.931	31.195	1.00 48.56	A
ATOM	142				9.198	35.736	33.067		
		N	LYS A					1.00 49.38	A
ATOM	143	CA	LYS A		7.883	35.973	33.623	1.00 49.73	A
MOTA	144	CB	LYS A	17	7.582	34.982	34.750	1.00 52.97	A
ATOM	145	CG	LYS A	17	6.250	35.226	35.448	1.00 56.86	A
ATOM	146	CD	LYS A		6.066	34.276	36.618		
								1.00 59.31	A
ATOM	147	CE	LYS A		4.763	34.552	37.354	1.00 59.95	A
ATOM	148	NZ	LYS A	17	4.592	33.621	38.506	1.00 62.05	A
ATOM	149	С	LYS A	17	7.927	37.390	34.163	1.00 48.25	A
ATOM	150	0	LYS A	17	6.977	38.144	34.008	1.00 47.73	A
MOTA	151	N	LYS A	18	9.043	37.750	34.791	1.00 45.58	A
ATOM	152	CA	LYS A	18	9.190	39 101	35.309	1.00 45.26	A
ATOM	153	CB	LYS A	18	10.523	39.270	36.047	1.00 47.34	A
ATOM	154	CG	LYS A	18	10.627	38.493	37.362	1.00 50.10	A
ATOM	155	CD	LYS A	18	11.831	38.976	38.168	1.00 52.93	
									A
ATOM	156	CE	LYS A	18	11.869	38.358	39.550	1.00 55.07	A
MOTA	157	NZ	LYS A	18	12.933	38.968	40.398	1.00 59.20	A
ATOM	158	Ç	LYS A	18	9.107	40.110	34.171	1.00 41.59	A
ATOM	159	0	LYS A	18	8.585	41.206	34.349	1.00 42.70	A
ATOM	160	N	ILE A	19	9.633	39.740	33.008	1.00 40.25	A
ATOM	161	CA	ILE A	19	9.605	40.595	31.831	1.00 39.53	A
ATOM	162	CB	ILE A	19	10.494	40.015	30.710	1.00 42.08	А
ATOM	163		ILE A	19	10.133	40.631	29.369	1.00 41.71	A
ATOM	164		ILE A	19	11.969	40.214	31.074	1.00 42.52	A
ATOM	165	CD1		19	12.939	39.656	30.039	1.00 43.29	A
ATOM	166	C	ILE A	19	8.172	40.725	31.325	1.00 39.27	A
ATOM	167	0	ILE A	19	7.751	41.790	30.899	1.00 37.81	A
	168		GLU A	20	7.421	39.637	31.372		
MOTA		N						1.00 39.00	A
ATOM	169	CA	GLU A	20	6.036	39.692	30.930	1.00 40.27	A
ATOM	170	CB	GLU A	20	5.437	38.280	30.834	1.00 43.21	A
MOTA	171	CG	GLU A	20	5.898	37.474	29,606	1.00 48.10	A
					* *				**

Figure 11C

ATOM	172	CD	GLU	A	20	5.446	36.019	29.659	1.00 50.57	A
MOTA	173	OEl	GLU	A	20	5.832	35.316	30.617	1.00 52.42	A
ATOM	174	OE2	GLU	A	20	4.708	35.575	28.752	1.00 52.16	A
MCTA	175	С	GLU	A	20	5.195	40.546	31.873	1.00 40.09	A
MOTA	176	0	GLU	Ā	20	4.148	41.056	31.480	1.00 40.96	A
MOTA	177	N	ASN	A	21	5.637	4C.694	33.119	1.00 38.83	A
ATOM	178	CA	ASN	A	21	4.880	41.498	34.071	1.00 40.69	A
ATOM	179	CB	ASN	Ą	21	5.216	41.107	35.507	1.00 39.42	A
ATOM	180	CG	ASN	A	21	4.618	39.768	35.892	1.00 41.35	A
ATOM	181	OD1	ASN	A	21	3.905	39.151	35.102	1.00 38.98	A
ATOM	182	ND2	ASN	A	21	4.902	39.312	37.107	1.00 40.82	A
MOTA	183	C	ASN	A	21	5.163	42.958	33.846	1.00 42.25	A
ATOM	184	0	ASN	A	21	4.261	43.801	33.872	1.00 42.61	A
ATOM	185	N	GLU	A	22	6.432	43.244	33.602	1.00 41.94	A
ATOM	186	CA	GLU	A	22	6.893	44.589	33.343	1.00 41.44	A
MOTA	187	CB	GLU	A	22	8.403	44.563	33.127	1.00 43.01	A
MOTA	188	CG	GLU	Α	22	9.126	45.861	33.421	1.00 49.75	A
ATOM	189	CD	GLU	A	22	9.769	45.872	34.802	1.00 52.80	A
ATOM	190	OE1	GLU	A	22	10.611	44.988	35.077	1.00 53.66	A
ATOM	191	OE2	GLU	À	22	9.447	46.764	35.608	1.00 57.41	A
ATOM	192	C	GLU	A	22	6.188	45.082	32.068	1.00 41.34	A
ATOM	193	0	GLU	A	22	5.851	46.263	31.954	1.00 43.52	A
ATOM	194	N	ILE	A	23	5.964	44.175	31.116	1.00 37.55	A
ATOM	195	CA	ILE	A	23	5.295	44.530	29.863	1.00 35.10	A
ATOM	196	CB	ILE	A	23	5.418	43.408	28.800	1.00 36.19	A
ATOM	197	CG2	ILE	A	23	4.520	43.719	27.592	1.00 35.94	A
ATOM	198	CG1	ILE	Α	23	6.876	43.288	28.340	1.00 39.18	A
ATOM	199	CD1	ILE	A	23	7.122	42.193	27.324	1.00 40.80	A
ATOM	200	C	ILE	A	23	3.816	44.827	30.093	1.00 33.36	A
ATOM	201	0	ILE	A	23	3.284	45.796	29.568	1.00 28.55	A
MOTA	202	N	ALA	A	24	3.167	43.981	30.881	1.00 30.41	A
ATOM	203	CA	ALA		24	1.760	44.147	31.179	1.00 30.11	A
ATOM	204	CB	ALA	A	24	1.276	42.994	32.043	1.00 27.29	A
ATOM	205	С	ALA	A	24	1.531	45.479	31.893	1.00 31.41	A
ATOM	206	0	ALA	A	24	0.562	46.183	31.608	1.00 31.49	A
ATOM	207	N	ARG	Α	25	2.428	45.825	32.816	1.00 30.94	A
ATOM	208	CA	ARG	A	25	2.297	47.070	33.547	1.00 30.44	A
ATOM	209	CB	ARG	A	25	3.197	47.066	34.798	1.00 32.01	A
ATOM	210	CG	ARG	Α	25	2.727	46.101	35.894	1.00 34.49	A
ATOM	211	CD	ARG	A	25	3.471	46.326	37.218	1.00 39.65	A
ATOM	212	NE	ARG	A	25	4.873	45.907	37.177	1.00 40.74	A
ATOM	213	CΣ	ARG	A	25	5.308	44.687	37.496	1.00 43.06	A
ATOM	214	NH1	ARG	A	25	4.453	43.749	37.885	1.00 39.85	A
ATOM	215	NH2	ARG	A	25	6.606	44.399	37.399	1.00 40.30	A
ATOM	216	C	ARG	A	25	2.590	48.270	32.651	1.00 28.86	A
ATOM	217	С	ARG	A	25	1.907	49.296	32.728	1.00 29.35	A
ATOM	218	N	ILE	Α	26	3.587	48.147	31.790	1.00 26.96	A
MOTA	219	CA	ILE	A	26	3.917	49.226	30.875	1.00 29.07	A
ATOM	220	CB	ILE	A	26	5.132	48.832	29.990	1.00 28.43	A
ATOM	221	CG2	ILE	A	26	5.239	49.760	28.799	1.00 25.38	A
ATOM	222	CG1			26	6.414	48.835	30.839	1.00 28.70	A
ATOM	223	CD1	ILE	A	26	7.546	48.257	30.132	1.00 27.77	A
MOTA	224	C	ILE	A	26	2.719	49.571	29.968	1.00 30.92	A
MOTA	225	0	ILE		26	2.435	50.746	29.690	1.00 32.33	A
MOTA	226	N	LYS		27	2.019	48.540	29.512	1.00 30.36	A
MOTA	227	CA	LYS	A	27	0.887	48.730	28.627	1.00 30.40	A
MOTA	228	CB	LYS	A	27	0.449	47.388	28.045	1.00 33.83	A
ATOM	229	CG	LYS	A	27	1.520	46.729	27.185	1.00 39.64	A
ATOM	230	CD	LYS	A	27	1.167	45.294	26.831	1.00 44.41	A
ATOM	231	CE	LYS	À	27	-0.086	45.204	25.003	1.00 46.84	A

Figure 11D

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MOTA	232	NZ	LYS A	27	-0.384	43.774	25.598	1.00 53.94	A
ATOM	233	C	LYS A		-0.267	49.402	29.344	1.00 28,67	A
ATOM	234	0	LYS A		-0.919	50.252	28.767	1.00 26.05	A
ATOM	235	N	LYS A		-0.511	49.020	30.593	1.00 27.68	A
					-1.597	49.609	31.371	1.00 27.30	A
MOTA	236	CA	LYS A						
ATOM	237	CB	LYS A		-1.797	48.845	32.691	1.00 24.82	A
ATOM	238	CG	LYS A		-2.961	49.384	33.573	1.00 27.48	A
ATOM	239	CD	LYS 2	28	-4.263	49.506	32.744	1.00 31.59	A
ATOM	240	CE	LYS A	A 28	-5.526	49.699	33.606	1.00 30.02	A
ATOM	241	NZ	LYS A	A 28	-5.440	50.820	34.586	1,00 31.11	A
ATOM	242	С	LYS A		-1.284	51.076	31.641	1.00 29.57	A
ATOM	243	0	LYS A		-2.164	51.951	31.566	1.00 28.21	A
ATOM	244	N	LEU A		-0.017	51.359	31.923	1.00 29.36	A
	245	CA	LEU A		0.385	52.723	32.179	1.00 33.70	A
ATOM			LEU A		1.822	52.745	32.692	1.00 35.26	A
ATOM	246	CB							A
ATOM	247	CG	LEU A		2.023	53.727	33.847	1.00 38.04	
ATOM	248	CDl	LEU 2		3.363	53.485	34.506	1.00 39.85	A
ATOM	249	CD2	LEU A	1 29	1.891	55.149	33.332	1.00 38.01	Ą
ATOM	250	C	LEU A	A 29	0.243	53.561	30.905	1.00 34.59	A
ATOM	251	0	LEU A	A 29	-0.281	54.691	30.927	1.00 37.16	A
ATOM	252	N	LEU A	4 30	0.721	53.020	29.792	1.00 34.03	A
ATOM	253	CA	LEU A	A 30	0.616	53.724	28.528	1.00 35.56	A
ATOM	254	CB	LEU A		1.230	52.874	27.414	1.00 38.09	A
ATOM	255	CG	LEU A		1.470	53.508	26.050	1.00 40.19	A
ATOM	256	CD1	LEU A		2.270	54.805	26.163	1.00 39.79	A
			LEU A		2.215	52.484	25.198	1.00 45.44	A
ATOM	257	CD2				53.980	28.263	1.00 45.44	A
ATOM	258	C	LEU A		-0.882		27.794	1.00 33.56	A
ATOM	259	0	LEU A		-1.269	55.050			
ATOM	260	N	GLN A		-1.713	52.996	28.572	1.00 30.55	A
ATOM	261	CA	GLN A		-3.152	53.142	28.401	1.00 31.04	A
ATOM	262	CB	GLN A	4 31	-3.865	51.839	28.782	1.00 33.01	A
ATOM	263	CG	GLN A	31	-5.397	51.924	28.839	1.00 37.09	A
ATOM	264	CD	GLN A	A 31	-6.045	50.582	29.159	1.00 45.53	A
ATOM	265	OE1	GLN A	31	-5.715	49.940	30.159	1.00 52.72	A
ATOM	266	NE2	GLN A	A 31	-6.973	50.151	28.310	1.00 46.91	A
ATOM	267	С	GLN 2		-3.633	54.303	29.273	1.00 31.34	A
ATOM	268	Ċ	GLN A		-4.419	55.125	28.832	1.00 28.45	A
MOTA	269	N	LEU A		-3.141	54.376	30.509	1.00 30.93	A
			LEU A		-3.523	55.459	31.393	1.00 30.83	A
ATOM	270	CA			-2.988	55 237	32.811	1.00 30.03	A
ATOM	271	CB	LEU A		-3.572	54.156	33.732	1.00 31.79	Ā
ATOM	272	CG	LEU A						
ATOM	273	CDl	LEU ?		-2.810	54.215	35.075	1.00 33.29	A
ATOM	274	CD2	LEU A		-5.058	54.376	33.972	1.00 25.39	A
ATOM	275	С	LEU A		-3.031	56.797	30.860	1.00 32.26	A
MOTA	276	0	LEU A	A 32	-3.707	57.810	31.031	1.00 35.77	A
ATOM	277	N	THR A	A 33	-1.872	56.798	30.198	1.00 31.70	A
ATOM	278	CA	THR A	A 33	-1.298	58.019	29.640	1.00 33.33	A
ATOM	279	CB	THR A	A 33	0.158	57.787	29.156	1.00 35.07	A
ATOM	280	OG1	THR A	33	0.949	57.272	30.238	1.00 39.00	A
ATOM	281		THR A		0.776	59.087	28.687	1.00 34.58	A
ATOM	282	C	THR A		-2.120	58.560		1.00 33.63	A
	283	0	THR A		-2.237	59.767	28.298	1.00 33.87	A
ATOM			VAL A		-2.682	57.660	27.670	1.00 35.32	A
MOTA	284	N				58.046	26.531	1.00 35.32	A
ATOM	285	CA	VAL 2		-3.507				
ATOM	286	CB	VAL 2		-3.810	56.832	25.622	1.00 36.47	A
ATOM	287		VAL :		-4.825	57.200	24.550	1.00 34.36	A
MOTA	288		VAL 2		-2.514	56.354	24.966	1.00 38.97	A
ATOM	289	C	VAL 2		-4.809	58.655	27.036	1.00 37.01	A
ATOM	290	0	VAL I		-5.250	59.695	26.540	1.00 35.59	A
ATOM	291	N	TRP 3	A 35	-5.403	57.992	28.022	1.00 36.34	A

Figure 11E

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MOTA	292	CA	TRP 2	3.5	-6.645	58.429	28.648	1.00 38.95	A
ATOM	293	CB	TRP A	3.5	-7.022	57.429	29.742	1.00 44.03	A
ATOM	294	CG	TRP 2	35	-8.302	57 716	30.478	1.00 45.10	A
ATOM	295	CD2	TRP A	3.5	-8.445	58.535	31.640	1.00 46.19	A
ATOM	296	CE2	TRP 2	35	-9.820	58.545	31.973	1.00 47.39	A
ATOM	297	CE3	TRP 3	35	-7.556	59.277	32.429	1.00 46.15	A
ATOM	298	CD1	TRP A	35	-9.549	57.260	30.166	1.00 45.42	A
MOTA	299	NE1	TRP A	35	-10.468	57.752	31.063	1.00 47.75	A
ATOM	300	CI2	TRP A	35	-10.317	59.258	33.067	1.00 48.12	A
ATOM	301	CZ3	TRP A	35	-8.049	59.991	33.509	1.00 44.34	A
ATOM	302	CH2	TRP A	35	-9.419	59.968	33.824	1.00 47.03	A
ATOM	303	С	TRP A	3.5	-6.408	59.814	29.259	1.00 40.04	A
ATOM	304	0	TRP A		-7.155	60.759	29.013	1.00 39.15	A
ATOM	305	N	GLY A		-5.352	59.934	30.055	1.00 38.98	A
ATOM	306	CA	GLY A		-5.039	61.211	30.658	1.00 38.44	A
ATOM	307	C	GLY A		-5.034	62.327	29.634	1.00 38.41	A
ATOM	308	0	GLY A		-5.626	63.390	29.845	1.00 40.58	A
ATOM	309	N	ILE A		-4.356	62.094	28.517	1.00 39.01	A
ATOM	310	CA	ILE A		-4.279	63.079	27.451	1.00 40.60	A
ATOM	311	CB	ILE A		-3.395	62.584	26.301	1.00 40.20	A
ATOM	312	CG2				63.517	25.136	1.00 39.97	A
ATOM	313	CG1			-1.939	62.477	26.767	1.00 41.25	A
ATOM	314	CD1			-1.036	61.777	25.778	1.00 38.31	A
ATOM	315	C	ILE A		-5.662	63.366	26.886	1.00 42.00	A
ATOM	316	ō	ILE A		-6.019	64.516	26.654	1.00 42.52	A
ATOM	317	N	LYS A		-6.438	62.317	26.660	1.00 42.56	A
ATOM	318	CA	LYS A		-7.766	62.505	26.112	1.00 45.16	A
ATOM	319	CB	LYS A		-8.459	61.156	25.925	1.00 46.50	A
ATOM	320	CG	LYS 2		-9.683	61.235	25.026	1.00 53.52	A
ATOM	321	CD	LYS ?		-10.840	62.017	25.651	1.00 55.55	Ā
ATOM	322	CE	LYS A		-11.812	62.480	24.581	1.00 56.01	A
ATOM	323	NZ	LYS F		-11.165	63.504	23.714	1.00 55.27	A
ATOM	324	C	LYS A		-8.594	63.405	27.025	1.00 46.34	A
ATOM	325	ō	LYS A		-9.237	64.343	26.561	1.00 48.52	A
ATOM	326	N	GLN A		-8.554	63.120	28.322	1.00 47.82	A
ATOM	327	CA	GLN A		-9.303	63.877	29.318	1.00 49.21	A
ATOM	328	CB	GLN A		-9.142	63.230	30.591	1.00 52.07	A
ATOM	329	CG	GLN A		-9.431	61.742	30.727	1.00 59.01	A
ATOM	330	CD	GLN A		-10.889	61.409	30.513	1.00 61.01	A
ATOM	331		GLN A		-11.742	61.800	31.310	1.00 63.56	A
ATOM	332	NE2	GLN A		-11.188	60.677	29.437	1.00 62.00	A
MOTA	333	C	GLN A		-8.840	65.324	29.412	1.00 48.78	A
MOTA	334	ō	GLN A		-9.649	66.243	29.431	1.00 48.03	A
ATOM	335	N	LEU A		-7.530	65.522	29.472	1.00 49.67	A
ATOM	336	ĊA	LEU A		-6.980	66.861	29.590	1.00 50.78	A
ATOM	337	CB	LEU A		-5.479	66.785	29.868	1.00 49.62	A
ATOM	338	CG	LEU A		-4.736	68.118	29.982	1.00 47.99	A
ATOM	339	CD1			-5.416	69.030	31.011	1.00 51.32	A
ATOM	340		LEU A		-3.300	67.852	30.376	1.00 48.82	A
ATOM	341	C	LEU A		-7.227	67.736	28.363	1.00 53.20	A
ATOM	342	ō	LEU A		-7.230	68.964	28.457	1.00 53.67	A
ATOM	343	И	GLN A		-7.433	67.104	27.215	1.00 56.61	Ā
ATOM	344	CA	GLN A		-7.649	67.850	25.994	1.00 60.81	Ā
ATOM	345	CB	GLN A		-7.295	66.994	24.781	1.00 60.00	A
ATOM	346	CG	GLN A		-7.257	67.753	23.467	1.00 61.60	A
ATOM	347	CD	GLN A		-6.756	66.885	22.330	1.00 61.14	A
ATOM	348		GLN A		-5.630	66.377	22.367	1.00 56.12	Ā
ATOM	349	NE2			-7.598	66.697	21.316	1.00 60.61	A
ATOM	350	C	GLN A		-9.084	68.344	25.915	1.00 63.54	A
MOTA	351	ō	GLN A		-9.388	69.277	25.179	1.00 65.13	A
		-		-		· - · ·			

Figure 11F

MOTA	352	M	ALA	A	42	-9.971	67.722	26.679	1.00 67.16	A
ATOM	353	CA	ALA	A	42	-11.362	68.150	36.693	1.00 70.08	A
MOTA	354	CB	ALA	A	42	-12.252	67.043	27.249	1.00 68.59	A
ATOM	355	C	ALA	Α	42	-11.461	69.423	27.556	1.00 72.76	A
MOTA	356	0	ALA	A	42	-12.506	69 748	28.123	1.00 73.45	A
ATOM	357	N	ARG	Α	43	-10.338	70.137	27.642	1.00 75.35	A
MOTA	358	CA	ARG	A	43	-10.202	71.377	28.413	1.00 76.97	A
ATOM	359	CB	ARG	A	43	-9.391	71.131	29.705	1.00 77.23	A
ATOM	360	CG	ARG	Α	43	-10.130	70.250	30.753	1.00 77.83	A
ATOM	361	CD	ARG	A	43	-9.265	69.690	31.889	1.00 76.18	A
ATOM	362	NE	ARG	A	43	-10.053	68.919	32.864	1.00 76.19	A
ATOM	363	CZ	ARG	Α	43	-10.933	67.967	32.551	1.00 76.17	A
ATOM	364	NH1	ARG	A	43	-11.153	67.657	31.284	1.00 76.24	A
ATOM	365	NH2	ARG	Α	43	-11.605	67.326	33.507	1.00 77.89	A
ATOM	366	С	ARG	A	43	-9.560	72.481	27.570	1.00 79.19	A
ATOM	367	0	ARG	A	43	-10.131	72.882	26.548	1.00 79.42	A
ATOM	368	N	ILE	Α	44	-8.381	72.970	27.993	1.00 81.42	A
ATOM	369	CA	ILE	A	44	-7.646	74.059	27.276	1.00 84.32	A
ATOM	370	CB	ILE	А	44	-6.073	73.998	27.495	1.00 84.97	A
MOTA	371	CG2	ILE	A	44	-5.292	74.824	26.419	1.00 85.80	A
ATOM	372	CG1	ILE	A	44	-5.728	74.612	28.829	1.00 85.52	A
MOTA	373	CD1	ILE	A	44	-6.344	76.011	29.055	1.00 87.04	A
MOTA	374	С	ILE	A	44	-7.908	73.987	25.790	1.00 86.80	A
MOTA	375	0	ILE	A	44	-8.577	74.829	25.234	1.00 87.60	A
ATOM	376	N	LEU	A	45	-7.318	73.007	25.145	1.00 87.99	A
MOTA	377	CA	LEU	A	45	-7.541	72.910	23.737	1.00 88.13	A
ATOM	378	CB	LEU	\mathcal{A}	45	-6.257	72.509	23.009	1.00 88.79	A
MOTA	379	CG	LEU	A	45	-5.940	73.339	21.770	1.00 90.46	A
ATOM	380	CDl	LEU	A	45	-7.147	73.370	20.837	1.00 91.58	A
MOTA	381	CD2	LEU	A	45	-5.596	74.779	22.173	1.00 90.84	A
ATOM	382	С	LEU	A	45	-8.656	71.944	23.376	1.00 88.30	A
MOTA	383	0	LEU	A	45	-9.507	71.665	24.291	1.00 87.82	A
ATOM	384	NT	LEU	A	45	-8.614	71.561	22.151	1.00 88.77	A
MOTA	385	CA	ACE	В	0	29.175	18.175	21.874	1.00 35 90	В
MOTA	386	С	ACE		0	27.867	18.849	22.146	1.00 36 69	B
ATOM	387	0	ACE		0	27.836	20.078	22.299	1.00 33.24	В
ATOM	388	N	ARG		1	26.771	18.065	22.218	1.00 32 69	В
ATOM	389	CA	ARG		1	25.440	18.590	22.450	1.00 34.24	В
ATOM	390	CB	ARG		1	24.436	17.446	22.644	1.00 33.49	В
ATOM	391	CG	ARG		1	22.976	17.878	22.651	1.00 32.92	В
MOTA	392	CD	ARG		1	22.436	18.177	21.260	1.00 34.95	В
ATOM	393	NE	ARG		1	22.366	16.972	20.443	1.00 38.88	В
MOTA	394	CZ	ARG		1	21.548	15.952	20.706	1.00 42.79	В
ATOM	395	NH1	ARG		1	20.740	16.012	21.765	1.00 44.66	В
ATOM	396	NH2	ARG		1	21.550	14.868	19.943	1.00 39.72	В
ATOM	397	C		В	1	25.424	19.498	23.685	1.00 35.96	B
ATOM	398	0	ARG	В	1	24.920	20.617	23.628	1.00 36.55	В
ATOM	399	N	MET	В	2	26.008	19.009	24.779	1.00 39.89	В
ATOM	400	CA	MET	В	2	26.077	19.769	26.022	1.00 43.08	В
ATOM	401	CB	MET		2	27.113	19.163	26.972	1.00 43.87	В
ATOM	402	CG	MET		2	26.728	17.847	27.523	1.00 46.86	В
ATOM	403 404	SD CE	MET		2	25.304 24.024	18.010	28.700 27.524	1.00 52.01	B
ATOM					2		18.375		1.00 52.70	B
MOTA	405	С	MET		2	26.440 25.723	21.219	25.789 26.212	1.00 45.76	В
MOTA	406 407	N O	MET LYS		2 3	27.570	22.121	25.125	1.00 44.09 1.00 47.94	3
MOTA MOTA	408	CA	LYS		3	28.082	22.736	24.820	1.00 47.94	B p
ATOM ATOM	409	CB	LYS		<i>3</i> 3	28.082	22.565	24.820	1.00 52.42	В
ATOM	410	CG	LYS		3	30.552	23.540	24.595	1.00 58.36	B B
ATOM	411	CD	LYS		3	30.382	24.937	24 030	1.00 60.17	B
-14 OF1	خدی	ردب	تبي	_	J	JU. JUL	4 · 2 · 2 · /	74 020	±.00 00.1/	Đ

Figure 11G

ATOM	412	CE	LYS	В	3	31.618	25.777	24.321	1.00 62.06	В
ATOM	413	NZ	LYS	B	3	31.561	27.140	23.704	1.00 63.71	В
ATOM	414	С	LYS	В	3	27.095	23.479	23.907	1.00 52.65	В
ATOM	415	0	LYS	₿	3	26.858	24.671	24.092	1.00 52.44	B
MOTA	416	11	GLN	3	4	26,517	22.774	22.934	1.00 52.13	В
ATOM	417	CA	GLN	В	4	25.549	23.387	22.032	1.00 54.04	В
ATOM	418	CB	GLN	В	4	24.930	22.330	21.105	1.00 57.72	В
MOTA	419	CG	GLN		4	25.792	21.880	19.925	1.00 60.44	B
ATOM	420	CD	GLN		4	25.855	32.923	18.816	1.00 62.71	В
ATOM	421	OE1			4	26.404	24.017	18.997	1.00 64.51	В
ATOM	422	NE2	GLN		4	25.276	22.592	17.661	1.00 62.62	В
MOTA	423	C	GLN		4	24.441	24.062	22.836	1.00 52.63	В
ATOM	424	0	GLN		4	24.013	25.162	22.518	1.00 53.56	В
ATOM	425	N	ILE		5	23.982	23.379	23.878	1,00 52.62	B
MOTA	426	CA	ILE		5	22.929	23.880	24.758	1.00 52.02	В
ATOM	427	CB	ILE		5	22.443	22.766	25.721	1.00 51.17	В
ATOM	428	CG2	ILE		5	21.412	23.329	26.691	1.00 52.10	В
MOTA	429	CG1	ILE		5	21.871	21.592	24.917	1.00 52.55	В
ATOM	430	CD1	ILE		5	21.496	20.363	25.754	1.00 53.47	B
ATOM	431	C	ILE	В	5	23.452	25.043	25.600	1.00 53.54	3
ATOM	432	0	ILE	В	5	22.743	26.013	25.849	1.00 52.58	
ATOM	433	N	GLU		6	24.701	24.932	26.036	1.00 55.54	В
ATOM	434	CA	GLU		6	25.309	25.970	26.850	1.00 56.11	В
ATOM	435	CB	GLU		6	25.637	25.477	27.437		3
	436	CG	GLU		6	26.487	24.157	28.171	1.00 53.75 1.00 53.07	В
MOTA		CD	GLU		6	27.729	23.735	28.939	1.00 50.56	В
ATOM ATOM	437 438	OE1	GLU		6	28.816	23.611	28.329		В
ATOM	439	OE2			6	27.604	23.516	30.159	1.00 49.24	В
ATOM	440	C	GLU		6	25.522	27.227	26.009	1.00 47.31	В
ATOM	441	0	GLU	В	6	25.418	28.335	26.515	1.00 58.94	В
ATOM	442	N	ASP	В	7	25.811	27.031	24.725		В
	443		ASP	В	7	26.003	28.179	23.848	1.00 57.18 1.00 58.51	В
ATOM ATOM	444	CA CB	ASP	В	ź	26.681	27.772	22.536	1.00 59.88	В
ATOM	445	CG	ASP	В	7	28.121	27.339	22.732		В
MOTA	445			B	7	28.827	27.339		1.00 62.42	В
ATOM		002	ASP	3	7	28.559	26.382	23.542	1.00 62.53	В
	447				7			22.056	1.00 66.19	В
ATOM	448	C		В	7	24.668	28.858	23.543	1.00 58.25	В
ATOM	449	0	ASP	В		24.624	30.070	23.314	1.00 56.00	В
ATOM ATOM	450 451	N CA	LYS	3	8 8	23.591 22.240	28.069 28.563	23.547 23.276	1.00 57.96	В
									1.00 57.58	B
ATOM	452	CB		В	8	21.331	27.405	22.838	1.00 57.99	В
MOTA	453	CG		В	8 8	19.911	27.844	22.484	1.00 60.08	В
ATOM	454	CD		B	8	19.915	28.785	21.280	1.00 60.12	В
ATOM	455	CE	LYS			18.697	29.725	21.268	1.00 60.76	В
ATOM	456	NZ		B	8	17.371 21.653	29.062 29.248	21.146	1.00 58.46	В
ATOM	457	C	LYS		8 8			24.517 24.411	1.00 56.86	В
ATOM	458	0	ILE	В		20.832	30.166 28.790	25.689	1.00 53.70	В
atom atom	459 460	N CA		B	9 9	22.077 21.621	29.368	25.889	1.00 57.87 1.00 59.31	В
	461	CB		э В	9					В
ATOM						22.073	28.517	28.161	1.00 57.40	3
ATOM	462		ILE		9	21.788	29.270	29.459	1.00 57.21	В
ATOM	463		ILE		9	21.361	27.165	28.154	1.00 56.21	В
ATOM	464		ILE		9	21.885	26.199	29.212	1.00 54.49	В
ATOM	465	C	ILE		9	22.216	30.770	27.093	1.00 50.74	В
ATOM	466	0	ILE		9	21.565	31.682	27.608	1.00 61.51	В
ATOM	467	N	GLU		10	23.456	30.923	26.633	1.00 61.69	В
ATOM	468	CA	GLU		10	24.170	32.198	26.691	1.00 63.76	В
ATOM	469	CB	GLU		10	25.629	32.000	26.279	1.00 53.63	В
ATOM ATOM	470	CG	GLU		10	26 456	33.275	26.254	1,00 65.58	B
ATOM	471	CD	GLU	=	10	27.854	33.054	25.707	1.00 66.48	В

Figure 11H

ATOM	472		GLU E		27.979	32.751	24.499	1.00 67.38	В
MOTA	473	OE2	GLU E	10	28.824	33.173	26.485	1.00 66.28	В
ATOM	474	С	GLU E	10	23.515	33.211	25.757	2.00 65.16	В
ATOM	475	0	GLU E	10	23.261	34.351	26.141	1.00 65.81	В
ATOM	476	N	GLU E	11	23.255	32.785	24.524	1.00 66.64	В
ATOM	477	CA	GLU E	11	22.517	33.637	23.529	1.00 67.59	В
ATOM	478	CB	GLU E	11	22.348	32.832	22.252	1.00 68.72	B
MOTA	479	CG	GLU B	11	21.735	33.636	21.117	1.00 72.88	В
MOTA	480	CD	GLU B	11	22.556		20.767	1.00 74.80	B
ATOM	481	OE1	GLU B	11	23.775		20.526	1.00 75.81	B
ATOM	482	OE2	GLU B	11	21.978		20.731	1.00 74.99	В
ATOM	483	C	GLU B	11	21.307		24.098	1.00 67.17	В
ATOM	484	0	GLU B		20.998		23.918	1.00 68.06	В
MOTA	485	N	ILE B		20.541		24.784	1.00 64.61	В
MOTA	486	CA	ILE B		19.288		25.389	1.00 61.65	В
ATOM	487	CB	ILE B		18.458		25,926	1.00 62.84	В
ATOM	488	CG2			17.416	33.094	26.940	1.00 62.63	
ATOM	489	CG1			17.799	31.864	24.750	1.00 62.03	В
ATOM	490	CD1			16.910	30.698	25.156	1.00 61.39	В
ATOM	491	C	ILE B		19.553	34.776	26.522	1.00 58.17	В
ATOM	492	ō	ILE B		19.010	35.881	26.523		В
ATOM	493	N	GLU B		20.388	34.384	27.479	1.00 55.05 1.00 55.87	B
ATOM	494	CA	GLU B		20.300	35.268	28.600	1.00 55.87 1.00 54.71	B
ATOM	495	CB	GLU B	13	21.817	34.669	29.477		В
ATOM	496	CG	GLU B	13	21.447			1.00 50.19	B -
ATOM	497	CD	GLU B	13	22.577	33.331	30.109	1.00 49.30	В
ATOM	498	OE1		13	23.741	32.729 32.765	30.933	1.00 49.10	B
ATOM	499	OE2	GLU B	13	22.304		30.472	1.00 50.79	₿
ATOM	500	C	GLU B	13	21.166	32.194	32.027	1.00 47.00	B
ATOM	501	ō	GLU B	13	20.790	36.612	28.047	1.00 55.57	В
ATOM	502	Ŋ	SER B	14	21.950	37.667	28.557	1.00 56.33	B
ATOM	503	CA	SER B	14	22.468	36.559	26.977	1.00 56.02	В
ATOM	504	CB	SER B	14	23.488	37.763	26.350	1.00 55.71	В
ATOM	505	OG	SER B	14	23.968	37.389 38.550	25.278	1.00 54.62	В
ATOM	506	C	SER B	14	21.366	38.624	24.629	1.00 56.74	В
ATOM	507	0	SER B	14	21.300		25.736	1.00 55.96	В
ATOM	508	N	LYS B	15	20.310	39.854 37.979	25.696	1.00 54.91	В
ATOM	509	CA	LYS B	15	19.208		25.263	1.00 55.94	В
ATOM	510	CB	LYS B	15	18.454	38.704 37.779	24.650	1.00 56.72	В
MOTA	511	CG	LYS B	15	17.494	38.484	23.693	1.00 55.67	В
ATOM	512	CD	LYS B	15	17.000		22.772	1.00 58.33	В
ATOM	513	CE	LYS B	15	16.440	37.527	21.705	1.00 59.89	В
ATOM	514	NZ	LYS B	15	16.020	38.282 37.375	20.518	1.00 60.44	В
ATOM	515	C	LYS B	15	18.282	39.207	19.412 25.748	1.00 63.67	B
ATOM	516	0	LYS B	15	17.716	40.296		1.00 56.31	B
ATOM	517	N	GLN B	16	18.146		25.661	1.00 56.65	B
ATOM	518	CA	GLN B	16	17.293	38.403	26.791	1.00 56.76	В
ATOM	519	CB	GLN B	16	17.306	38.748	27.911	1.00 57.28	B
MOTA	520	CG	GLN B	16		37.604	28.923	1.00 56.94	В
ATOM	521	CD			16.000	37.394	29.652	1.00 55.90	В
ATOM	522		GLN B	16	15.908 16.613	36.017	30.300	1.00 56.24	B
ATOM	523		GLN B	16 16		35.722	31.263	1.00 57.78	В
ATOM	524	N.E.Z	GLN B	16 16	15.044	35.160	29.760	1.00 55.69	B
ATOM	525	0	GLN B		17.825	40.040	28.528	1.00 58.82	B
ATOM	526	Ŋ		16	17.049	40.929	28.905	1.00 59.68	В
ATOM			LYS B	17	19.148	40.163	28.621	1.00 59.44	3
ATOM	527 528	CA	LYS B	17	19.711	41.379	29.189	1.00 59.84	В
	525	CB	LYS B	17	21.228	41.275	29.386	1.00 60.80	В
ATOM ATOM	529 530	CG	LYS B	17	21.740	42.343	30.356	1.00 64.52	В
MOTA	530	CD	LYS B	17	23.250	42.325	30.576	1.00 65.30	В
-10H	221	شت	מינים	17	24.008	42.784	29.344	1.00 67.22	В

Figure 111

Docket/App No.: 0399.1192-008

Title: Inhibitors of HIV Membrane Fusion Inventors: Debra M. Eckert, et al.

25 465 42.963 29.625 1.00 67.09 ATCM 532 NE LYS B 17 533 C LYS B 17 19.389 42.522 28.230 1.00 59.16 MOTA 534 O LYS B 17 535 N LYS B 18 ATOM 19.088 43.634 28.656 1.00 55.77 26.931 1.00 58.38 25.931 1.00 58.35 ATOM 19.433 42.233 CA LYS B 18 ATOM 536 19.128 43.248 CB LYS B 18 19.247 42.675 20.617 42.083 537 ATOM 24.511 1.00 59.38 ATOM 538 CG LYS B 18 24.130 1.00 61.47 В 539 CD LYS B 18 ATOM 21.768 43.111 24.099 1.00 61.91 540 CE LYS B 18 22.034 43.761 ATOM 25.461 1.00 63.50 25.423 1.00 63.66 26.163 1.00 58.27 541 NZ LYS B 18 23.248 44.620 ATOM В 542 C LYS B 18 543 O LYS B 18 544 N ILE B 19 545 CA ILE B 19 ATOM 17.706 43.761 17.475 44.969 ATOM 26.254 1.00 58.82 26.268 1.00 56.89 26.488 1.00 53.76 ATOM 16.757 42.835 В ATOM 15.356 43.189 B MOTA 546 CB ILE B 19 14.455 41.931 26.488 1.00 53.33 13.057 42.286 26.976 1.00 52.66 14.416 41.322 25.081 1.00 52.79 547 CG2 ILE B 19 ATOM В 548 CG1 ILE B 19 ATOM В 549 CD1 ILE B 19 550 C ILE B 19 13.543 MOTA 40.069 24.970 1.00 54.45 ATOM 15.117 43.961 27.786 1.00 52.88 В MOTA 551 O ILE B 19 14.327 44.897 27.809 1.00 51.74 ₿ 552 N GLU B 20 553 CA GLU B 20 ATOM 15.781 43.565 28.869 1.00 51.04 ATOM 15.601 44.267 30.128 1.00 50.08 В 554 CB GLU B 20 16.403 43.613 31.253 1.00 49.90 ATOM MOTA 555 CG GLU B 20 15.969 42.207 31.584 1.00 54.19 MOTA 556 CD GLU B 20 16.761 41.620 32.736 1.00 55.98 B MOTA 557 OE1 GLU B 20 18.010 41.568 32.641 1.00 53.23 В 558 OE2 GLU B 20 ATOM 16.127 41.215 33.735 1.00 56.20 559 C GLU B 20 560 O GLU B 20 MOTA 16.053 45.706 29.965 1.00 49.26 В MOTA 15.479 46.611 30.561 1.00 48.88 В 561 N ASN B 21 562 CA ASN B 21 ATOM 17.093 45.912 29.163 1.00 49.15 17.596 47.256 ATOM 28.930 1.00 49,99 B 563 CB ASN B 21 ATCM 18.885 47.229 28.098 1.00 51.35 В 564 CG ASN B 21 20.054 46.576 MCTA 28.834 1.00 54.79 ATOM 565 OD1 ASN B 21 20.421 46.978 29.943 1.00 55.96 566 ND2 ASN B 21 20.656 45.572 28.205 1.00 57.15 ATOM В 567 C ASN B 21 568 O ASN B 21 569 N GLU B 22 16,537 48.078 28.202 1.00 49.83 ATOM ATOM 16.249 49.209 28.591 1.00 50.14 В 15.957 47.497 ATOM 27.153 1.00 47.34 В 14.942 48.160 26.354 1.00 44.99 570 CA GLU B 22 ATOM ATOM 571 CB GLU B 22 14.534 47.272 25.174 1.00 44.99 В 572 CG GLU B 22 ATOM 13.703 47.990 24.116 1.00 51.85 В 14.377 573 CD GLU B 22 MCTA 49.268 23.621 1.00 54.71 В ATOM 574 OE1 GLU B 22 15.543 49.191 23.182 1.00 55.60 В 575 OE2 GLU B 22 ATOM 13.743 50.350 23.673 1.00 57.01 B 576 C GLU B 22 577 O GLU B 22 13.710 48.521 27.183 13.044 49.527 26.916 ATOM 1.00 44.17 ATOM 1.00 45.50 578 N ILE B 23 13.386 47.693 28.169 1.00 42.28 ATOM В 579 CA ILE B 23 580 CB ILE B 23 12.241 47.977 11.801 46.724 ATOM 29.024 1.00 40.61 B ATOM 29.809 1.00 38.57 CG2 ILE B 23 10.836 47.096 30.925 ATOM 581 1.00 37.31 11.138 45.733 1.00 38.28 MOTA 582 CG1 ILE B 23 28.850 CD1 ILE B 23 10.634 44.436 29.530 ATOM 583 1.00 38.32 В 584 C ILE B 23 585 O ILE B 23 586 N ALA B 24 ATOM 12.626 49.108 29.974 1.00 41.50 ATOM 11.793 49.926 30.349 1.00 41.54 B 13.898 49.170 1.00 40.42 ATOM 30.348 В 1.00 38.49 MOTA 587 CA ALA B 24 14.349 50.240 31.224 CB ALA B 24 C ALA B 24 MOTA 588 15.811 50.059 31.578 1.00 34.26 14.147 589 C 51.562 30.490 1.00 37.76 MOTA ATOM 590 O ALA B 24 13.674 52.528 31.078 1.00 38.39 591 N ARG B 25 MOTA 14.498 51.591 29.204 1.00 36.47

Figure IIJ

ATOM	592	CA	ARG B	25	14.354	52.796	28.394	1,00 38.10	B
ATOM	593	CB	ARG B	25	15.086		27.051	1.00 40.70	B
ATOM	594	CG	ARG B	25	15.609	52.668	27.195	1.00 46.74	В
ATOM	595	CD	ARG B	25	17.315	52.949	25.879	1.00 51.86	В
ATOM	596	NE	ARG B	25	17.268	51.823	24.954	1.00 56.83	В
MOTA	597	CZ	ARG B	25	17.894	50.666	25.152	1.00 59.56	В
MOTA	598	NHI	ARG B	25	18.615	50.477	26.253	1.00 60.08	В
ATOM	599	NH2	ARG B	25	17.792	49.696	24.257	1.00 59.81	В
ATOM	600	C	ARG B	25	12.901	53.185	28.158	1.00 36.71	В
MOTA	601	0	ARG B	25	12.555	54.361	28.165	1.00 36.54	В
ATOM	602	N	ILE B	26	12.051	52.197	27.942	1.00 36.23	В
ATOM	603	CA	ILE B	26	10.642		27.733	1.00 34.33	В
MOTA	604	CB	ILE B	26	9.944	51.152	27.370	1.00 34.16	В
ATOM	605	CG2	ILE B	26	8.432	51.293	27.496	1.00 31.45	B
ATOM	606	CG1	ILE B	26	10.423	50.722	25.985	1.00 34.01	В
ATOM	607	CD1	ILE B	26	9.879	49.403	25.540	1.00 34.37	В
ATOM	608	С	ILE B	26	10.046	53.059	29.005	1.00 34.32	В
MOTA	609	0	ILE B	26	9.317	54.053	28.956	1.00 33.13	В
MOTA	610	N	LYS B	27	10.371	52.457	30.141	1.00 34.59	В
MOTA	611	CA	LYS B	27	9.898	52.941	31.433	1.00 35.31	B
MOTA	612	CB	LYS B	27	10.366	52.005	32.544	1.00 36.43	В
ATOM	613	CG	LYS B	27	9.398	50.872	32.885	1.00 40.24	В
ATOM	614	CD	LYS B	27	10.162	49.643	33.347	1.00 44.60	В
ATOM	615	CE	LYS B	27	11.278	49.991	34.334	1.00 50.65	B
ATOM	616	NZ	LYS B	27	12.209	48.831	34.560	1.00 54.97	В
MOTA	617	C	LYS B	27	10.382	54.355	31.712	1.00 35.58	B
ATOM	618	0	LYS B	27	9.666	55.140	32.318	1.00 36.82	В
ATOM	619	N	LYS B	28	11.599	54.670	31.268	1.00 36.91	B
MOTA	620	CA	LYS B	28	12.189	55.993	31.463	1.00 37.71	B
ATOM	621	CB	LYS B	28	13.627	56.017	30.958	1.00 42.60	B
MOTA	622	CG	LYS B	28	14.604	56.755	31.851	1.00 49.26	B
MOTA	623	CD	LYS B	28	15.299	55.778	32.818	1.00 55.52	В
ATOM	624	CE	LYS B	28	14.318	54.979	33.680	1.00 58.79	B
ATOM	625	NZ	LYS B	28	15.015	53.887	34.421	1.00 59.10	В
ATOM	626	C	LYS B	28	11.397	57.044	30.677	1.00 37.60	В
ATOM	627	0	LYS B	28	10.956	58.045	31.240	1.00 40.12	В
ATOM	628	N	LEU B	29	11.250	56.826	29.368	1.00 35.33	В
ATCM	629	CA	LEU B	29	10.515	57.754	28.524	1.00 35.90	В
ATOM	630	CB	LEU B	29	10.440	57.267	27.071	1.00 36.49	\mathfrak{A}
ATOM	631	CG	LEU B	29	9.495	58.127	26.202	1.00 37.58	В
MCTA	632	CDI		29	9.958	59.581	26.260	1.00 36.39	В
ATOM	633	CD2		29	9.441	57.641	24.744	1.00 35.00	В
ATOM	634	C	LEU B	29	9.103	57.912	29.047	1.00 35.09	B
ATOM ATOM	635 636	0	LEU B	29 30	8.568	59.015	29.095	1.00 34.76	В
ATOM	637	N CA	LEU B	30	8.512 7.161	56.787 56.746	29.426 29.946	1.00 33.74	В
ATOM	638	CB	LEU B	30	6.789	55.284		1.00 30.65	В
ATOM	639	CG	LEU B	30	5.385	54.822	30.181 30.558	1.00 32.72	В
ATOM	640		LEU B	30	4.353	55.404	29.599	1.00 31.65	B
ATOM	641		LEU B	30	5.377	53.282	30.511		В
ATOM	642	CD2	LEU B	30	6.985	57.588	31.213	1.00 31.69 1.00 31.56	В
ATOM	643	0	LEU B	30	6.051	58.398	31.301	1.00 26.54	B
ATOM	644	N	GLN B	31	7.860	57.442	32.206	1.00 31.24	
ATOM	645	CA	GLN B	31	7.668	58.265	33.398	1.00 31.24	B B
ATOM	646	CB	GLN B	31	8.551	57.801	34.564	1.00 33.01	B
ATOM	647	CG	GLN B	31	10.013	57.729	34.321	1.00 40.81	B
ATOM	648	CD	GLN B	31	10.737	57.086	35.491	1.00 44.04	s B
ATOM	649		GLN B	31	10.804	57.648	36.598	1.00 43.99	В
ATOM	650		GLN B	31	11.270	55.889	35.258	1.00 41.97	В
ATOM	651	C	GLN B	31	7.906	59.734	33.072	1.00 34.12	В
						•			-

Figure 11K

MOTA	652	0	GLN	В	31	7.420	60.636	33.766	1 00 30.63	В
MOTA	653	N	LEU		32	8.629	59.961	31.984	1.00 34.46	B
ATOM	654	CA	LEU	B	3.2	8.935	61.292	31.523	1.00 36.10	В
ATOM	655	CB	LEU		32	10.070	61.231	30.504	1.00 40.01	В
ATOM	656	CG	LEU	3	32	10.340	62.546	29.775	1.00 40.15	3
ATOM	657		LEU	3	32	10.853	63.586	30 765	1.00 43.23	В
ATOM	658	CD2	LEU	3	32	11.354	62.310	28.668	1.00 43.00	B
ATOM	659	C	LEU	B	32	7.711	61.949	30.890	1.00 36.08	В
ATOM	660	O	LEU		32	7.552	63.162	30.964	1.00 37.71	B
ATOM	661	N	THR		33	6.859	61.149	30.255	1.00 32.40	₿
ATOM	662	CA	THR	B	33	5.659	61.679	29.617	1.00 31.31	₿
ATOM	663	CB	THR		33	5.179	60.753	28.480	1.00 30.70	В
MOTA	664	0G1	THR		33	4.536	59.603	29.030	1.00 40.03	В
ATOM	665	CG2	THR		33	6.371	60.282	27.654	1.00 31.28	₿
ATOM	666	C	THR		33	4.550	61.845	30.668	1.00 30.03	B
MOTA	667	0	THR		33	3.739	62.772	30.585	1.00 30.10	В
ATOM	668	N	VAL		34	4.507	60.933	31.636	1.00 27.29	В
ATOM	669	CA	VAL		34	3.546	61.010	32.735	1.00 25.28	B
ATOM	670	CB	VAL		34	3.695	59.806	33.690	1.00 26.71	₿
MOTA	671		VAL		34	2.920	60.036	34.985	1.00 27.25	В
ATOM	672	CG2	VAL		34	3.176	58.565	32.997	1.00 23.84	B
ATOM	673	C	VAL		34	3.822	62.310	33.476	1.00 22.65	В
ATOM	674	0	VAL		34	2.899	63.064	33.763	1.00 21.36	B
MOTA	675	N	TRP		35	5.100	62.580	33.757	1.00 22.24	В
MOTA	676	CA	TRP		35	5.502	63.828	34.414	1.00 20.87	В
ATOM	677	CB	TRP		3.5	7.016	63.843	34.653	1.00 23.71	В
MOTA	678	CG	TRP		35	7.523	65.040	35.434	1.00 26.08	В
ATOM	679	CD2	TRP		35	7.013	65.551	36.681	1.00 25.13	В
ATOM	680	CE2	TRP		35	7.767	66.698	37.003	1.00 28.35	B
ATOM	681	CE3	TRP		35	5.985	65.143	37.547	1.00 24.83	В
ATOM	682	CD1		B	35 35	8.540 8.692	65.880	35.074	1.00 25.67 1.00 27.74	B
ATOM	683	NE1		B	35	7.532	66.877 67.455	36.006 38.165		В
ATOM ATOM	684 685	CZ2	TRP		35	5.749	65.889	38.699	1.00 28.38 1.00 23.47	B
ATOM	686	CH2	TRP		35	6.516	67.034	38.999	1.00 28.31	Б В
ATOM	687	C	TRP		35	5.121	65.039	33.564	1.00 24.26	В
ATOM	688	0	TRP		35	4.695	66.063	34.088	1.00 23.94	В
ATOM	689	N	GLY		36	5.308	64.927	32.247	1.00 25.59	В
ATOM	690	CA	GLY		36	4.961	66.013	31.348	1.00 23.22	В
ATOM	691	C	GLY	B	36	3.479	66.364	31.343	1.00 25.72	B
ATOM	692	ō	GLY		36	3.138	67.529	31.352	1.00 28.94	В
ATOM	693	N	ILE		37	2.610	65.356	31.311	1.00 27.20	В
ATOM	694	CA		В	37	1.160	65.560	31.315	1.00 24.67	В
ATOM	695	CB		B	37	0.429	64.223	31.230	1.00 24.72	В
MOTA	696	CG2	ILE		37	-1.085	64.410	31.416	1.00 29.15	B
MOTA	697	CG1	ILE		37	0.700	63.581	29.879	1.00 22.40	В
ATOM	698	CD1	ILE		37	0.023	62.237	29.714	1.00 24.46	В
MOTA	699	С	ILE	B	37	0.734	66.295	32.579	1.00 25.86	В
ATOM	700	0		В	37	-0.019	67.255	32.517	1.00 25.23	B
ATOM	701	N	LYS	В	38	1.242	65.840	33.722	1.00 26.17	В
ATOM	702	CA	LYS	B	38	0.967	66.449	35.020	1.00 22.96	В
ATOM	703	CB	LYS		38	1.656	65.652	36.130	1.00 22.07	В
ATOM	704	CG	LYS		38	0.953	64.410	36.522	1.00 25.14	В
ATOM	705	CD	LYS		38	-0.225	64.727	37.423	1.00 28.48	В
ATOM	706	CE	LYS	3	38	-1.014	63.468	37.617	1.00 28.77	В
ATOM	707	NZ	LYS	В	38	-1.331	62.953	35.269	1.00 34.06	В
ATOM	708	C	LYS	В	3.8	1.458	67.877	35.102	1.00 23.87	В
ATOM	709	0	LYS	3	38	0.770	68.736	35,640	1.00 20.93	В
ATOM	710	N	GLN	В	39	2.662	68.140	34.593	1.00 26.53	В
MOTA	711	CA	GLN	В	39	3.189	69.493	34.682	1.00 30.76	B

Figure 11L

ATOM	712	CB	GLN	B	39	4.629	69.583	34.197	1.00 33.05	В
ATOM	713	CG	GLN	B	39	5.436	70.614	34.985	1.00 43,49	В
ATOM	714	CD	GLN	В	39	4.822	72.026	35.008	1.00 48.65	В
MOTA	715	OE1	GLN	B	39	4.889	72.774	34.021	1.00 51.46	В
ATOM	716	NES	GLN	Э	39	4.220	72.389	36.143	1.00 47.35	В
ATOM	717	C	GLN	B	39	2.343	70.417	33.843	1.00 31.81	В
ATOM	718	0	GLN	В	39	2.125	71.574	34.206	1.00 31.08	В
ATOM	719	N	LEU		40	1.897	69.904	32.703	1.00 31.01	В
ATOM	720	CA	LEU		40	1.065	70.671	31.807	1.00 33.41	В
MOTA	721	CB	LEU		40	0.872	69.886	30.517	1.00 32.63	B
ATOM	722	CG	LEU		40	-0.126	70.405	29.482	1.00 34.65	B
ATOM	723		LEU		40	0.171	71.843	29.092	1.00 35.24	В
ATOM	724	CD2			40	-0.058	69.495	28.281	1.00 35.90	В
ATOM	725	C	LEU		40	-0.289	70.943	32.469	1.00 36.85	В
ATOM	726	ō	LEU		40	-0.874	72.010	32.314	1.00 37 81	B
ATOM	727	N	GLN		41	-0.768	69.964	33.215	1.00 36.13	B
ATOM	728	CA	GLN		41	-2.046	70.063	33.894	1.00 30.13	В
ATOM	729	CB	GLN		41	-2.369	68.718	34.517	1.00 41.31	B
MOTA	730	CG	GLN		41	-3.833	68.459	34.735	1.00 47.08	В
ATOM	731	CD	GLN		41	-4.070	67.139	35.420	1.00 54.09	B
ATOM	732	OE1	GLN		41	-3.517	66.102	35.013	1.00 55.42	B
MOTA	733	NE2	GLN		41	-4.908	67.154	36.461	1.00 54.90	B
ATOM	734	C	GLN		41	-2.039	71.148	34.974	1.00 39.95	В
ATOM	735	ō	GLN		41	-2.988	71.925	35.089	1.00 39.23	B B
ATOM	736	N	ALA		42	-0.972	71.194	35.767	1.00 39.05	B
ATOM	737	CA	ALA		42	-0.845	72.188	36.824	1.00 38.56	B
ATOM	738	CB	ALA		42	0.345	71.852	37.757	1.00 34.14	B
MOTA	739	c	ALA		42	-0.647	73.566	36.228	1.00 40.18	В
ATOM	740	ō	ALA		42	~1.139	74.560	36.765	1.00 41.44	B
ATOM	741	N	ARG		43	0.078	73.634	35.118	1.00 41.82	B
ATOM	742	CA	ARG		43	0.340	74.910	34.476	1.00 43.71	B
ATOM	743	CB	ARG		43	1.242	74.713	33.260	1.00 47.26	В
ATOM	744	CG	ARG		43	1.703	75.997	32.592	1.00 51.08	B
ATOM	745	CD		В	43	2.582	75.677	31.401	1.00 54.95	3
ATOM	746	NE	ARG		43	3.778	74.947	31.813	1.00 57.04	В
ATOM	747	CZ	ARG		43	4.819	75.499	32.428	1.00 56.95	В
ATOM	748	NH1	ARG		43	4.816	76.794	32.703	1.00 55.89	B
ATOM	749		ARG		43	5.858	74.753	32.781	1.00 57.00	В
ATOM	750	Ç	ARG		43	-0.987	75.521	34.048	1.00 42.38	В
MOTA	751	0	ARG		43	-1.308	76.657	34.398	1.00 41.41	B
ATOM	752	N	ILE		44	-1.756	74.736	33.310	1.00 41.63	В
ATOM	753	CA	ILE	В	44	-3.059	75.143	32.810	1.00 43.24	В
ATOM	754	CB	ILE	В	44	-3.634	74.085	31.866	1.00 44.23	B
ATOM	755	CG2	ILE	В	44	~5.083	74.403	31.592	1.00 45.04	В
MOTA	756	CG1	ILE	В	44	-2.778	73.964	30.600	1.00 47.45	В
MOTA	757	CD1	ILE	3	44	-3.156	72.745	29.719	1.00 49.42	В
ATOM	758	С	ILE	В	44	-4.081	75.306	33.935	1.00 42.37	В
ATOM	759	0	ILE	В	44	-4.422	76.416	34.332	1.00 42.08	\boldsymbol{z}
ATOM	760	N	LEU	В	45	-4.573	74.162	34.398	1.00 42.20	В
ATOM	761	CA	LEU	B	45	-5.564	74.042	35.450	1.00 43.16	B
ATOM	762	CB	LEU	В	45	-6.041	72.592		1.00 46.08	B
MOTA	763		LEU		45	-6.459	72.001	34.162	1.00 47.45	3
MOTA	764	CD1	LEU	3	45	-7.011	70.594	34.357	1.00 47.51	В
ATOM	765		LEU		45	-7.504	72.899	33.521	1.00 48.61	В
ATOM	766	С	LEU		45	-5.016	74.467	36.810	1.00 42.48	В
ATOM	767	0	LEU		45	-5.674	75.260	37.483	1.00 45.15	3
ATOM	768	NT	LEU		45	-3.945	73.987	37.206	1.00 45.66	3
ATOM	769		ACE		0	15.143	11.286	26.819	1.00 82.49	Ċ
MOTA	770	С	ACE	C	0	14.956	12.476	27.674	1.00 82.44	C
MOTA	771	0	ACE	С	0	13.700	12.858	27.851	1.00 84.06	Ċ

Figure 11M

Docket/App No.: 0399.1192-008 Title: Inhibitors of HIV Membrane Fusion

Inventors:

Debra M. Eckert, et al.

ATOM	772	N	ARG	С	1	15.890	13.103	28.220	1.00 82.91	С
ATOM	773	CA	ARG		1	15.663	14.253	29.073	1.00 83.87	Ĉ
ATOM	774	CB	ARG	С	1	16.156	13.970	30.491	1.00 83.74	C
ATOM	775	ÇG	ARG	C	1	15.769	15,065	31.456	1.00 83.47	C
ATOM	776	CD	ARG	C	1	14.340	15.542	31.156	1.00 81.66	Ċ
ATOM	777	NE	ARG	C	1	13.249	14.748	31.726	1.00 81.00	С
MOTA	778	CZ	ARG	C	1	13.069	13.434	31.597	1.00 79.16	Ċ
ATOM	779	NHl	ARG	С	1	13.901	12.678	30.889	1.00 79.80	С
MOTA	780	NH2	ARG	C	1	12.010	12.875	32.168	1.00 79.18	С
ATOM	781	C	ARG	С	1	16.282	15,541	28.550	1.00 85.03	C
ATOM	782	0	ARG	С	1	15.975	16.644	29.016	1.00 85.10	C
ATOM	783	N	MET	C	2	17.169	15.394	27.581	1.00 85.40	C
ATOM	784	CA	MET	С	2	17.778	16.568	27.012	1.00 86.91	C
ATOM	785	CB	MET	C	2	19.063	16.215	26.290	1.00 88.20	C
ATOM	786	CG	MET	C	2	19.711	17.410	25.653	1.00 89.72	С
ATOM	787	SD	MET	C	2	21.192	16.917	24.823	1.00 94.98	C
MOTA	788	CE	MET	С	2	22.111	16.349	26.176	1.00 91.53	С
ATOM	789	C	MET	C	2	16.771	17.154	26.036	1.00 87.44	С
MOTA	790	0	MET	C	2	16.699	18.368	25.872	1.00 89.05	C
MOTA	791	N	LYS	С	3	16.001	16.278	25.391	1.00 85.66	C
ATOM	792	CA	LYS	C	3	14.973	16.712	24.444	1.00 83.09	C
ATOM	793	CB	LYS	C	3	14.033	15.551	24.107	1.00 82.50	C
ATOM	794	CG	LYS	C	3	12.921	15.895	23.122	1.00 81.54	C
ATOM	795	CD	LYS		3	11.926	14.746	23.005	1.00 81.93	C
ATOM	796	CE	LYS		3	10.866	15.022	21.952	1.00 80.79	С
ATOM	797	NZ	LYS		3	10.154	16.300	22.214	1.00 82.56	С
ATOM	798	С	LYS		3	14.177	17.809	25.128	1.00 82.12	С
ATOM	799	0	LYS		3	14.053	18.925	24.617	1.00 81.76	С
MOTA	800	N	GLN		4	13.651	17.474	26.302	1.00 80.32	С
ATOM	801	CA	GLN		4	12.856	18.401	27.094	1.00 78.87	C
ATOM	802	CB	GLN		4	12.504	17.759	28.440	1.00 79.91	C
ATOM	803	CG	GLN		4	12.122	16.275	28.356	1.00 80.66	С
ATOM	804	CD	GLN		4	11.087	15.971	27.280	1.00 81.02	C
ATOM	805	OE1			4	11.348	16.140	26.082	1.00 79.52	C
ATOM	806	NEC	GLN		4	9.907	15.516	27.701	1.00 81.57	C
ATOM	807	C	GLN		4.	13.667	19.680	27.299	1.00 77.97	C
ATOM ATOM	808 809	N	GLN ILE	C	4 5	13.186 14.902	20.781 19.530	27.032 27.772	1.00 78.45	C
ATOM	810	CA		C	5	15.785	20.670	27.974	1.00 76.07	C
ATOM	811	CB		С	5	17.206	20.220	28.381	1.00 73.07	C
ATOM	812	CG2		C	5	18.175	21.388	28.264	1.00 71.17	0
ATOM	813	CG1		C	5	17.174	19.623	29.795	1.00 72.84	c
ATOM	814	CD1		C	5	18.518	19.113	30.285	1.00 71.39	C
ATOM	815	C	ILE		5	15.880	21.423	26.656	1.00 74.14	C
ATOM	816	ō		Ċ	5	15.939	22.651	26.628	1.00 73.70	Č
MOTA	817	N	GLU		6	15.895	20.664	25.567	1.00 73.88	Ċ
ATOM	818	CA		C	6	15.972	21.222	24.225	1.00 73.70	C
ATOM	819	CB		C	6	16.395	20.135	23.229	1.00 72.24	č
ATOM	820	CG	GLU	C	6	17.787	19.535	23.464	1.00 69.96	C
ATOM	821	CD	GLU	C	6	18.922	20.428	22.985	1.00 68.01	C
ATOM	822		GLU		6	19.044	21.575	23.461	1.00 65.93	C
ATOM	823	OE2	GLU	С	6	19.702	19.963	22.125	1.00 68.18	С
ATOM	824	C	GLU	С	6	14.602	21.773	23.842	1.00 74.50	C
MOTA	825	0	GLU	С	6	14.476	22.546	22.890	1.00 75.27	C
ATOM	826	N	ASP	C	7	13.577	21.372	24.587	1.00 74.82	C
ATOM	827	CA	ASP	C	7	12,218	21.838	24.327	1.00 76.17	С
ATOM	828	CB	ASP		7	11.195	20.742	24.644	1.00 77.40	С
ATOM	829	ÇG	ASP		7	11.408	19.488	23.818	1.00 78.45	С
ATOM	330		ASP		7	11 518	19.609	22.580	1.00 79.26	С
ATOM	931	OD2	ASP	С	7	11.452	18.380	24 404	1.00 79.10	C

Figure 11N

Docket/App No.: 0399.1192-008
Title: Inhibitors of HIV Membrane Fusion

Inventors: Debra M. Eckert, et al.

ATOM	832	С	ASP C	7	11.906	23.079	25.160	1.00 75.92	С
ATOM	833	ō	ASP C	7	11.379		24.643	1.00 77.15	č
ATOM	834	N	LYS C	8	12.223	23.024	26.452	1.00 74.05	C
ATOM	835	CA	LYS C	8	11.987		27.336	1.00 71.19	Ĉ
MOTA	836	CB	LYS C	8	12.565	23.886	28.727	1.00 72.69	Ċ
ATOM	837	CG	LYS C	8	11,647		29.901	1.00 72.96	Č
ATOM	838	CD	LYS C	8	10.428		29.321	1.00 75.00	Ċ
ATOM	839	CE	LYS C	8	9.587		31.197	1.00 76.69	č
ATOM	840	NZ	LYS C	8	8.998		31.389	1.00 73.68	Ċ
ATOM	841	С	LYS C	8	12.727		26.679	1.00 69.24	c
ATOM	842	0	LYS C	8	12,295		26.745	1.00 69.77	ā
ATOM	843	N	ILE C	9	13.855		26.046	1,00 65.63	Ċ
ATOM	844	CA	ILE C	9	14.609		25.362	1.00 64.27	Ċ
ATOM	845	CB	ILE C	9	15.950		24.812	1.00 62,88	Ċ
MOTA	846	CG2		وَ	16.585		23.871	1.00 62.42	C
ATOM	847	CG1		وَ	16.900		25.976	1.00 64.19	C
ATOM	848	CD1		وَ	18.244		25.557	1.00 64.32	C
ATOM	849	C	ILE C	9	13.756		24.223	1,00 63.69	C
ATOM	850	ō	ILE C	وَ	13.735		23.985	1.00 63.21	Ċ
ATOM	851	N	GLU C	10	13.036		23.543	1.00 62.89	č
ATOM	852	CA	GLU C	10	12.163		22.429	1.00 62.21	Ċ
ATOM	853	CB	GLU C	10	11.419		21.886	1.00 63.68	Ċ
ATOM	854	CG	GLU C	10	10.451		20.751	1,00 66.12	Č
ATOM	855	CD	GLU C	10	9.688		20.251	1.00 67.29	C
ATOM	856		GLU C	10	8.874	24.125	19.318	1.00 69.26	C
ATOM	857	OE2		10	9.894	22.845	20.780	1.00 68.71	Ċ
MOTA	858	С	GLU C	10	11.142	27.147	22.831	1.00 60.65	c
ATOM	859	ō	GLU C	10	10.991	28.157	22.147	1.00 60.16	Ċ
MOTA	860	N	GLU C	11	10.429	26.898	23.927	1.00 60.41	Ċ
ATOM	861	CA	GLU C	11	9.415	27.826	24.435	1.00 58.98	Č
ATOM	862	CB	GLU C	11	8.736	27.243	25.683	1.00 59.35	å
ATOM	863	CG	GLU C	11	9.709	26.588	26.652	1.00 61.78	Ċ
ATOM	864	CD	GLU C	11	9.376	26.801	28.127	1.00 63.00	C
ATOM	865		GLU C	11	9.329	27.972	28.563	1.00 54.82	Ċ
ATOM	866	OE2		11	9.184	25.804	28.855	1.00 60.50	Ċ
ATOM	867	C	GLU C	11	10.021	29.186	24.772	1.00 58.03	С
ATOM	868	0	GLU C	11	9.519	30.229	24.351	1.00 59.21	Ċ
ATOM	869	N	ILE C	12	11.103	29.178	25.532	1.00 56.15	Ċ
MOTA	870	CA	ILE C	12	11.765	30.415	25.902	1.00 56.41	C
ATOM	871	CB	ILE C	12	13.043	30.139	26.710	1.00 55.29	С
MCTA	872	CG2	ILE C	12	13.791	31.448	26.950	1.00 52.26	C
ATOM	873	CG1	ILE C	12	12.680	29.404	28.008	1.00 55.06	C
ATOM	874	CD1	ILE C	12	13.858	29.085	28.914	1.00 55.11	C
MOTA	875	С	ILE C	12	12.132	31.239	24.671	1.00 57.76	С
ATOM	876	0	ILE C	12	11.944	32.454	24.659	1.00 59.18	C
ATOM	877	N	GLU C	23	12.668	30.589	23.642	1.00 60.62	С
ATOM	878	CA	GLU C	13	13.039	31.312	22.423	1.00 62.64	С
ATOM	879	ĊВ	GLU C	13	13.916	30.449	21.497	1.00 66.02	С
ATOM	880	CG	GLU C	13	13.319	29.091	21,138	1.00 70.85	C
ATOM	881	CD	GLU C	13	14.091	28.355	20.041	1.00 73.58	C
MOTA	882	OE1	GLU C	13	15.330	28.233		1.00 72.99	С
MOTA	883	OE2	GLU C	13	13.456	27.887			C
ATOM	884	С	GLU C	13	11.785	31.748	21.679	1.00 60.74	С
ATOM	885	0	GLU C	13	11.808	32.733	20.946	1.00 61 13	C
ATOM	886	N	SER C	14	10.695	31.010	21.864	1.00 59.71	C
ATOM	887	CA	SER C	14	9.432	31.350	21.211	1.00 60.53	С
ATOM	888	CB	SER C	14	8.392	30.248	21.439	1.00 59.88	С
MOTA	889	OG	SER C	14	7.157	30.571	20.820	1.00 56.34	С
ATOM	890	C	SER C	14	8.921	32.668	21.790	1.00 61.04	C
MOTA	891	0	SER C	14	8.793	33.655	21.073	1.00 59.08	C

Figure 110

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Title: Inhibitors of HIV Membrane Fusion Inventors: Debra M. Eckert, *et al.*

ATOM	892	N	LYS C	15	8.532	32.671	23.091	1.00 62.79	С
ATOM	893	CA	LYS C	15	8.153	33.873	23.771	1.00 64.30	С
ATOM	894	CB	LYS C	15	7.949	33.612	25.273	1.00 65,74	С
ATTOM	895	CG	LYS C	15	6.637	32.903	25.642	1.00 68.25	С
ATOM	896	CD	LYS C	15	5.534	32.695	27.154	1.00 69.92	С
ATOM	897	CE	LYS C	15	5.186	32.131	27.564	1.00 70.69	Ċ
ATOM	898	NZ	LYS C	15	4.078	33.079	27.241	1.00 73.69	č
ATOM	899	C	LYS C	15	9.130	35.029	23.601	1.00 64.03	Ċ
ATOM	900	Õ	LYS C	15	8.723	36.175	23.408	1.00 64.04	č
ATOM	901	N	GLN C	16	10.418	34.721	23.678	1.00 63.47	Ċ
MOTA	902	CA	GLN C	16	11.451	35.733	23.537	1.00 65.82	Ċ
ATOM	903	CB		16	12.813	35.064	23.393	1.00 65.17	C
			GLN C		13.970	36.027	23.413	1.00 65.29	a
ATOM	904 905	CD	GLN C	16 16	14.944	35.695	24.516	1.00 66.93	C
ATOM								1.00 68.93	
MOTA	906		GLN C	16	- 15.940	36.389	24.719		C
ATOM	907	NE2		16	14.657	34.621	25.244	1.00 66.55	C
MOTA	908	С	GLN C	16	11.157	36.605	22.317	1.00 67.53	С
ATOM	909	0	GLN C	16	11.172	37.836	22.397	1.00 68.90	C
ATOM	910	N	LYS C	17	10.886	35.952	21.193	1.00 67.63	C
ATOM	911	CA	LYS C	17	10.566	36.648	19.954	1.00 67.83	C
ATOM	912	CB	LYS C	17	10.355	35.627	18.833	1.00 69.39	С
ATOM	913	CG	LYS C	17	9.747	36.199	17.556	1.00 72.05	С
ATOM	914	CD	LYS C	17	10.657	37.203	16.835	1.00 73.47	C
ATOM	915	CE	LYS C	17	9.946	37.784	15.613	1.00 74.71	C
ATOM	916	NZ	LYS C	17	10.885	38.603	14.795	1.00 76.15	C
ATOM	917	С	LYS C	17	9.306	37.492	20.123	1.00 66.64	C
ATOM	918	0	LYS C	17	9.244	38.632	19.652	1.00 67.45	C
ATOM	919	N	LYS C	18	8.300	36.924	20.784	1.00 64.29	C
ATOM	920	CA	LYS C	18	7.049	37.641	21.019	1.00 63.62	С
ATOM	921	CB	LYS C	18	5.979	36.719	21.627	1.00 64.15	С
ATOM	922	CG	LYS C	18	5.088	36.062	20.586	1.00 66.52	С
ATOM	923	CD	LYS C	18	3.935	35.297	21.220	1.00 68.98	Ċ
ATOM	924	CE	LYS C	18	4.427	34.076	21.970	1.00 70.96	Ċ
ATOM	925	NZ	LYS C	18	5.098	33.116	21.040	1.00 72.62	Ċ
ATOM	926	C	LYS C	18	7.265	38.852	21.922	1.00 61.00	Č
ATOM	927	0	LYS C	18	6.854	39.958	21.585	1.00 61.84	C
ATOM	928	N	ILE C	19	7.904	38.653	23.067	1.00 56.58	C
ATOM	929	CA	ILE C	19	8.179	39.765	23.961	1.00 53.92	C
			ILE C		9.101	39.329	25.119	1.00 52.10	C
ATOM ATOM	930 931	CB CG2	ILE C	19 19	9.719	40.545	25.799	1.00 52.10	C
								1.00 51.55	
MOTA	932	CG1	ILE C	19	8.304	38.463	26.095		C
ATOM	933	CD1	ILE C	19	9.103	37.908	27.247	1.00 50.93	C
ATOM	934	С	ILE C	19	8.833	40.893	23.165	1.00 53.24	C
MOTA	935	0	ILE C	19	8.604	42.069	23.438	1.00 52.35	C
ATOM	936	N	GLU C	20	9.642	40.534	22.173	1.00 53.82	C
ATOM	937	CA	GLU C	20	10.294	41.536	21.338	1.00 54.86	C
ATOM	938	CB	GLU C	20	11.393	40.910	20.472	1.00 55.74	C
ATOM	939	CG	GLU C	20	12.554	40.318	21.251	1.00 56.50	C
ATOM	940	CD	GLU C	20	13.683	39.851	20.352	1.00 56.98	C
ATOM	941	OEL	GLU C	20	13.473	38.918	19.543	1.00 56.87	С
ATOM	942	OE2	GLU C	20	14.786	40.427	20.453	1.00 58.79	С
ATOM	943	С	GLU C	20	9.245	42.188	20.437	1.00 55.80	C
ATOM	944	0	GLU C	20	9.311	43.382	20.166	1.00 55.44	C
MOTA	945	N	ASN C	21	8.289	41.389	19.972	1.00 55.46	C
ATOM	946	CA	ASN C	21	7.223	41.899	19.118	1.00 57.62	C
ATOM	947	CB	ASN C	21	6.392	40.754	18.530	1.00 59.92	C
ATOM	948	CG	ASN C	21	7.060	40.101	17.325	1.00 63.29	С
ATOM	949	0D1	ASN C	21	6.574	39.092	16.806	1.00 62.67	С
MOTA	950	ND2	ASN C	21	8.169	40.684	16.856	1.00 61.87	С
ATOM	951	C	ASN C	21	6.307	42.829	19.891	1.00 58.25	С

Figure 11P

ATOM	952	0	ASN (21	5.649	43.697	19.309	1.00 59.75	С
MOTA	953	N	GLU (6.255	42.645	21.206	1.00 56.32	С
ATOM	954	CA	GLU (2 22	5.411	43.489	22.030	1.00 53.64	С
MOTA	955	CB	GLU (22	5.014	42.756	23.313	1.00 55.42	С
ATOM	956	CG	GLU (3.786	43.357	23.967	1 00 60.12	C
ATOM	957	$^{\circ}$	GLU (22	2.506	43.082	23.188	1.00 61.82	C
ATOM	958	OE1	GLU (22	2.559	43.024	21.942	1.00 62.49	C
MOTA	959		GLU (1.435	42.954	23.825	1.00 63.39	C
ATOM	960	C	GLU (22	6.158	44.791	22.344	1.00 50.89	C
ATOM	961	0	GLU (22	5.573	45.873	22.282	1.00 49.72	С
	962						22.665		
ATOM		N	ILE (7.448	44.691		1.00 47.08	C
ATOM	963	ÇA	ILE (23	8.259	45.876	22.948	1.00 46.40	C
ATOM	964	CB	ILE (23	9.752	45.504	23.290	1.00 47.53	C
MOTA	965	CG2		23	10.707	46.653	22.910	1.00 44.86	č
ATOM	966	CG1	ILE (23	9.898	45.178	24.783	1.00 45.28	С
ATOM	967	CD1	ILE (23	9.101	44.004	25.256	1.00 45.91	C
ATOM	968	С	ILE (23	8.222	46.771	21.717	1.00 46.76	С
ATOM	969	0	ILE (8.317	47.999	21.822	1.00 46.87	C
ATOM	97C	N	ALA C	24	8.071	46.137	20.556	1.00 47.50	C
ATOM	971	CA	ALA (24	8.002	46.828	19.271	1.00 46.10	C
ATOM	972	CB							
			ALA (8.112	45.809	18.126	1.00 44.51	С
ATOM	973	С	ALA C	24	6.706	47 644	19.137	1.00 45.09	C
MOTA	974	0	ALA C	24	6.741	48.810	18.752	1.00 43.05	C
ATOM	975	N	ARG C	25	5.566	47.034	19.445	1.00 43.64	Ċ
MOTA	976	CA	ARG (4.301	47.753	19.346	1.00 45.79	С
ATOM	977	CB	ARG C	25	3.115	46.807	19.581	1.00 44.07	С
MOTA	978	CG	ARG C	25	3.045	45.680	18.564	1.00 48.16	C
ATOM	979	CD	ARG C	25	1.677	44.986	18.458	1.00 50.13	Ċ
		NE			1.216				
MOTA	980		ARG C			44.299	19.664	1.00 54.12	C
ATOM	981	CZ	ARG C	25	0.665	44.888	20.725	1.00 58.36	С
MOTA	982	NHl	ARG C	25	0.475	46.206	20.756	1.00 59.26	C
ATOM	983	NH2	ARG C	25	0.268	44.148	21.755	1.00 59.83	Ċ
ATOM	984	C	ARG C		4.257	48.908	20.345		
								1.00 47.24	C
ATOM	985	0	ARG C	25	3.941	50.038	19.978	1.00 50.68	С
ATOM	986	N	ILE C	26	4.584	48.617	21.601	1.00 47.54	C
ATOM	987	CA	ILE C	26	4.591	49.608	22.673	1.00 44.40	С
ATOM	988	CB	ILE C		5.042	48.959			
							24.001	1.00 43.91	C
ATOM	989	CG2	ILE C	26	5.259	50.026	25.071	1.00 45.47	C
ATOM	990	CG1	ILE C	26	4.010	47.930	24.450	1.00 42.59	C
ATOM	991	CD1	ILE C	26	4.445	47.138	25.663	1.00 40.19	С
			ILE C						
ATOM	992	С			5.532	50.766	22.379	1.00 44.58	C
ATOM	993	0	ILE C	26	5.193	51.935	22.564	1.00 42.04	C
ATOM	994	N	LYS C	27	6.721	50.422	21.919	1.00 46.75	С
ATOM	995	CA	LYS C	27	7.754	51.394	21.619	1.00 51,78	Ċ
	996	CB	LYS C						
ATOM					8.915	50.674	20.951	1.00 54.23	C
ATOM	997	CG	LYS C	27	10.184	51.465	20.863	1.00 57.21	C
ATOM	998	$\mathbb{C}\mathbb{D}$	LYS C	27	11.313	50.479	20.644	1.00 60.99	C
ATOM	999	CE	LYS C	27	12.660	51.064	21.014	1.00 62.83	c
MOTA	1000	NZ			13.750	50.060	20.828	1.00 64.49	C
ATOM	1001	Ç	LYS C	27	7.299	52.556	20.750	1.00 52,44	C
ATOM	1002	0	LYS C	27	7.334	53.710	21.165	1.00 54.11	C
MOTA	1003	N	LYS C		6.877	52.239	19.538	1.00 53.88	Ċ
MOTA	1004	CA	LYS C		6.435	53.250	18.599	1.00 55.29	С
MOTA	1005	CB	LYS C	28	6.169	52.582	17.249	1.00 57.59	C
ATOM	1006	CG	LYS C	28	7.390	51.841	16.717	1.00 59.15	С
ATOM	1007	CD	LYS C		7.041	50.830	15.635	1.00 62.19	č
ATOM	1008	CE	LYS C		8.292	50.088	15.158	1.00 63.12	С
MOTA	1009	NZ	LYS C	28	9.029	49.411	16.282	1,00 65.69	C
ATOM	1010	C	LYS C	2.8	5.187	53.931	19.122	1.00 55,14	С
MOTA	1011	0	LYS C		5.052	55.147	19.030	1.00 57.43	Ċ
		-			2.022				_

Figure 11Q

ATOM	1012	N	LEU C	29	4,275	53.138	19.671	1.00 52,27	C
MCTA	1013	CA	LEU C	29	3.025	53.649	20.214	1.00 51.04	Č
MOTA	1014	CB	LEU C	29	2.281	52.485	20.855	1.00 51.13	C
MOTA	1015	CG	LEU C	29	0.776	52.493	21,051	1.00 50.66	C
ATOM	1016	CD1	LEU C	29	0.051	52.868	19.755	1.00 51.59	C
ATOM	1017	CD2	LEU C	29	0.389	51.100	21.491	1.00 50.29	C
MOTA	1018	С	LEU C	29	3.347	54.739	21.245	1.00 50.83	С
		ō	LEU C	29	2.739	55.805	21.269	1.00 53.58	
MOTA	1019								C
ATOM	1020	N	LEU C	30	4.327	54.457	22.089	1.00 50.52	C
MOTA	1021	CA	LEU C	30	4.767	55.397	23.100	1.00 48.88	C
			LEU C	30	5.813	54.730	23,997	1.00 48.03	ē
ATOM	1022	CB							
ATOM	1023	CG	LEU C	30	6.485	55.530	25.113	1.00 47.31	С
MOTA	1024	CD1	LEU C	30	5.447	56.172	26.033	1.00 45.24	С
	1025	CD2	LEU C	30	7.398	54.575	25.889	1.00 48.28	С
ATOM									
ATOM	1026	C	LEU C	30	5.374	56.587	22.379	1.00 48.83	C
ATOM	1027	0	LEU C	30	5.020	57.736	22.642	1.00 48.40	C
ATOM	1028	N	GLN C	31	6.298	56.289	21.470	1.00 49.93	C
MOTA	1029	CA	GLN C	31	6.983	57.304	20.670	1.00 52.00	C
ATOM	1030	CB	GLN C	31	7.822	56.609	19.590	1.00 35.56	C
ATOM	1031	CG	GLN C	31	8.628	57.513	18,645	1.00 61.26	C
			GLN C	31	9.768	58.241			
MOTA	1032	CD					19.333	1.00 64.58	С
ATOM	1033	OEL	GLN C	31	10.233	57.818	20.391	1.00 68.00	C
MOTA	1034	NE2	GLN C	31	10.249	59.318	18.715	1.00 64.37	C
	1035		GLN C	31	5.947	58.225	20.009	1.00 49.56	č
ATOM		C							
ATOM	1036	0	GLN C	31	6.192	59.415	19.814	1.00 45.68	C
ATOM	1037	N	LEU C	32	4.793	57.657	19.675	1.00 47.64	С
ATOM	1038	CA	LEU C	32	3.723	58.401	19.034	1.00 48.95	С
ATOM	1039	CB	LEU C	32	2.689	57.433	18.461	1.00 50.72	С
MOTA	1040	CG	LEU C	32	1.602	57.935	17.502	1.00 51.93	С
ATOM	1041	CD1	LEU C	32	2.209	58.293	16.154	1.00 50.26	C
MOTA	1042	CD2	LEU C	32	0.554	56.840	17.313	1.00 51.55	C
ATOM	1043	C	LEU C	32	3.070	59.295	20.077	1.00 49.32	C
ATOM	1044	٥	LEU C	32	3.040	60.519	19,929	1.00 50.01	С
					2.545	58.659	21.125		
MOTA	1045	N	THR C	33				1.00 48.74	C
ATOM	1046	CA	THR C	33	1.878	59.324	22.246	1.00 43.86	C
ATOM	1047	CB	THR C	33	1.643	58.329	23.400	1.00 46.04	C
ATOM	1048	0G1	THR C	33	0.707	57.332	22.977	1.00 47.18	Ċ
ATOM	1049	CG2	THR C	33	1.121	59.039	24.639	1.00 42.89	C
MOTA	1050	С	THR C	33	2.683	60.494	22.771	1.00 41.04	С
ATOM	1051	0	THR C	33	2.132	61.537	23.122	1.00 39,26	C
ATOM	1052	N	VAL C	34	3.992	60.303	22.843	1.00 38.83	C
MOTA	1053	CA	VAL C	34	4.886	61.346	23.301	1.00 36.90	C
ATOM	1054	CB	VAL C	34	6.329	60.825	23.377	1.00 33.71	C
MOTA	1055	CG1	VAL C	34	7.270	61.907	23.904	1.00 29.40	Ċ
ATOM	1056	CG2	VAL C	34	6.366	59.590	24.251	1.00 31.78	C
ATOM	1057	C	VAL C	34	4.795	62.437	22.254	1.00 38,65	C
ATOM	1058	0	VAL C	34	4.489	63.595	22.556	1.00 39.38	C
		-							
ATOM	1059	N	TRP C	35	5.049	62.038	21.010	1.00 42.18	C
MOTA	1060	CA	TRP C	35	5.002	62.937	19.868	1.00 40.00	C
ATOM	1061	CB	TRP C	35	4.991	62.134	18.563	1.00 40.06	С
	1062	CG	TRP C	3.5	4.848	63.020	17.399	1.00 36.56	Ċ
ATOM									
MOTA	1063	CD2	TRP C	35	3.696	63.161	16.561	1.00 36.91	Ç
ATOM	1064	CE2	TRP C	35	3.968	54.212	15.673	1.00 41.20	C
ATOM	1065	CE3	TRP C	35	2.457	62.505	16.503	1.00 40.31	č
MOTA	1066	CDl	TRP C	35	5.748	63.944	16.974	1.00 35.30	C
ATOM	1067	NE1	TRP C	35	5.228	64.673	15.945	1.00 39.45	C
MOTA	1068	C52	TRP C	35	3.037	64.643	14.704	1.00 38.75	C
	1069	CZ3	TRP C	35	1.528	62.934	15.541	1.00 39.54	č
ATOM									
ATOM	1070	CH2	TRP C	35	1.827	63.984	14.651	1.00 41.30	C
MOTA	1071	С	TRP C	35	3.764	63.833	19.901	1 00 39.80	С

Figure 11R

ATOM	1072	0	TRP	С	35	3.868	65.052	19.769	1.00 38.39	С
ATOM	1073	N		C	36	2.601	63.210	20.059	1.00 36.88	Ċ
MOTA	1074	CA		Ċ	36	1.356	63.957	20.103	1.00 38.94	č
ATOM	1075	C		Ċ	36	1.315	64.973	21.226	1.00 38.45	ā
ATOM	1076	ō		Č	36	0.931	66.114	21.001	1.00 37.76	č
MOTA				C	37	1.700	64.557	22.435	1.00 40.86	
	1077	N								C
ATOM	1078	CA		C	37	1.724	65.442	23.604	1.00 36.66	C
ATOM	1079	CB	ILE		37	2.352	64.755	24.857	1.00 36.83	С
MOTA	1080	CG2		С	37	2.489	65.766	25.005	1.00 27.32	С
ATOM	1081	CG1		C	37	1.512	63.548	25.275	1.00 37.14	C
ATOM	1082	CD1	ILE	С	37	2.066	62.794	26.501	1.00 35.85	С
ATOM	1083	C	ILE	С	37	2.587	66.655	23.284	1.00 38.37	C
ATOM	1084	0	ILĒ	С	37	2.187	67.788	23.529	1.00 37.68	С
ATOM	1085	N	LYS	С	38	3.775	66.399	22.740	1.00 40.28	С
MOTA	1086	CA	LYS	С	38	4.717	67.456	22.381	1.00 42.51	C
ATOM	1087	CB		Ċ	38	5.927	66.868	21.639	1.00 46.36	С
ATOM	1088	ÇG		c	38	7.109	67.829	21.391	1.00 52.00	С
ATOM	1089	CD		č	38	8,125	67.162	20.433	1.00 56.10	Č
ATOM	1090	CE		Ċ	38	9.365	68.008	20.096	1.00 56.61	C
ATOM	1090	NZ		C	38	10.340	68.155	21.222	1.00 59.57	Ç
ATOM	1092	С		C	38	3.995	68.445	21.483	1.00 42.06	C
ATOM	1093	0		C	38	4.351	69.628	21.428	1.00 41.76	C
ATOM	1094	N		C	39	2.977	67.966	20.774	1.00 39.73	C
MOTA	1095	CA		С	39	2.232	68.862	19.908	1.00 40.05	С
ATOM	1096	CB	GLN		39	1.499	68.100	18.778	1.00 41.27	C
MOTA	1097	CG		C	39	2.385	67.148	17.928	1.00 42.44	C
MOTA	1098	CD	GLN		39	3.681	67.786	17.465	1.00 42.00	C
ATOM	1099	OE1	GLN	C	39	3.678	68.822	16.813	1.00 44.81	С
ATOM	1100	NE2	GLN	С	39	4.802	67.163	17.802	1.00 46.04	C
ATOM	1101	C	GLN	С	39	1.241	69.638	20.781	1.00 36.22	C
MOTA	1102	0	GLN	C	39	1.344	70.845	20.885	1.00 34.78	C
ATOM	1103	N	LEU	С	40	0.285	68.950	21.398	1.00 34.58	С
MOTA	1104	CA	LEU	C	40	-0.696	69.625	22.268	1.00 36.22	C
ATOM	1105	CB	LEU	С	40	-1.465	68.595	23.096	1.00 34.67	С
ATOM	1106	CG	LEU	С	40	-2.365	69.192	24.186	1.00 34.61	С
ATOM	1107	CD1	LEU	С	40	-3.392	70.142	23.510	1,00 34.28	С
ATOM	1108			C	40	-3.057	68.084	24.972	1.00 30.45	С
ATOM	1109	С	LEU		40	-0.029	70.630	23.226	1.00 36.51	C
ATOM	1110	ō	LEU		40	-0.494	71.755	23.419	1.00 36.17	Ċ
ATOM	1111	N	GLN		41	1.068	70.220	23.832	1.00 36.56	Ċ
ATOM	1112	CA	GLN		41	1.764	71.106	24.751	1.00 38.77	Ċ
ATOM	1113	CB		C	41	2.883	70.310	25.433	1.00 38.66	Ċ
ATOM	1114	CG		C	41	3.606	70.994	26.582	1.00 46.41	Ċ
	1115	CD	GLN		41	4.245	69.979	27.529	1.00 50.25	C
ATOM							69.028	27.091	1.00 53.94	C
MOTA	1116	OEl		C	41	4.898				
ATOM	1117	NE2		C	41	4.063	70.180	28.831	1.00 52.04	C
ATOM	1118	C		C	41	2.291	72.336	23.998	1.00 37.58	C
MOTA	1119	0	GLN		41	2.190	73.466	24.486	1.00 38.73	C
ATOM	1120	N	ALA		42	2.827	72.128	22.795	1.00 36.75	C
ATOM	1121	CA	ALA		42	3.365	73.249	22.014	1.00 36.93	С
ATOM	1122	CB	ALA		42	4.084	72.717	20.779	1.00 32.48	C
ATOM	1123	C	ALA		42	2.241	74.209	21.500	1.00 35.85	C
ATOM	1124	0		C	42	2.407	75.427	21.602	1.00 34.18	C
ATOM	1125	N	ARG	C	43	1.101	73.629	21.249	1.00 32.51	C
MOTA	1126	CA	ARG	C	43	-0.072	74.365	20.829	1.00 34.59	C
ATOM	1127	CB	ARG	C	43	-1.152	73.357	20.524	1.00 34.80	C
ATOM	1128	ÇG	ARG	С	43	-2.467	73.891	20.060	1.00 36.54	С
ATOM	1129	CD	ARG		43	-3.310	72.667	19.769	1.00 37.93	C
ATOM	1130	NE	ARG		43	-4.631	72.945	19,236	1.00 40.51	C
ATOM	1131	CZ	ARG	C	43	-5.491	71.985	18,901	1.00 42.74	C

Figure 11S

ATOM	1132	NH2	AR	g c	43	-5.	127	70.717	19.05	1 1 00	41.40	С
ATOM	1133	NHI	AR	G C	43	-6.		72.288				Ċ
ATOM	1134	C	ARG	3 C	43	-0.		75.347				C
ATOM	1135	0		G C		-1.		76.425				0
ATOM	1136	N		εc		-0.		74.971				ū
ATOM	1137	CA	ILI	E C	44	-0.		75.799			43.04	C
ATOM	1138	CB	IL		44	-1.		74.891	25.39			0
ATOM	1139	CG2			44	-Ī.		75.717	26.59			C
ATOM	1140	CG1			44	-2.		74.041	24.87		46.16	
ATOM	1141	CD1			44	-2.		72.877	25.78			C
ATOM	1142	C	ILE		44			76.802	24.80			C
ATOM	1143	0	ILE		44	-0.		77.961	25.04		40.03	C
ATOM	1144	N	LEU		45			76.350	25.009		40.33	C
ATOM	1145	CA	LEU		45			77.184	25.579			C
ATOM	1146	CB	LET		45			76.322	26.422		40.22	C
ATOM	1147	CG	LEU		45			75.608	27.694		40.80	C
ATOM	1148	CD1			45			74.714	27.364		42.51	0
ATOM	1149		LEU		45	4.0		74.789	28.299		39.44	C
ATOM	1150	C	LEU		45	3.2		77.953	24.540		38.95	C
ATOM	1151	0	LEU		45	3.0		77.689	23.327		39.83	c
ATOM	1152	NT	LEU		4.5	4.0		8.810	24.964			C
ATOM	1153	OH2			2	8.2		2.369	27.138		38.82	W
ATOM	1154	OH2	TIF		3	28.7		4.001	17.582			M
ATOM	1155	OH2			4	0.4		2.209	33.896		50.43	M ₁
ATOM	1156	OH2			5	6.0		0.609	23.199		45.29	W
ATOM	1157	OH2	TIP		6	1.9		8.695	31.896			W
ATOM	1158	OH2	TIP	W	7	20.2		8.975	19.485		49.56	W
ATOM	1159	OH2	TIP	W	8	18.5		5.442	35.405		34.86	W
MOTA	1160	OH2	TIP		9	-5.9		4.337	32.524	1.00	31.24	W
ATOM	1161	OH2	TIP	M	10	11.5		8.853	30.945		47.94	W
ATOM	1162	OH2	TIP		1.1	-9.3		5.456	23.794		46.60	W
ATOM	1163	OH2	TIP	W	12	-2.8		5.953	28.078		59.15	W
ATOM	1164	OH2	TIP	W	13	-1.4		7.305	18.859	1.00	37.51	W
MOTA	1165	OH2	TIP	W	24	-5.5		4.224	37.408		39.02	W
ATOM	1166	OH2	TIP	W	15	-5.0	79 7	5.908	18.460		48.65	W
ATOM	1167	OH2	TIP	W	16	12.4	44 5	8.431	21.920	1.00	62.97	W
ATOM	1168	OH2	TIP	W	17	-12.9	27 7	0.555	24.520		61.81	W
ATOM	1159	OH2	TIP	W	18	14.8	97 2	3.356	34.046	1.00	40.13	W
ATOM	1170	OH2	TIP	W	19	3.1	54 4	0.721	28.964	1.00	29.89	W
ATOM	1171	OH2	TIP	W	20	4.2	90 8.	1.951	24.440	1.00	44.83	W
MOTA	1172	OH2	TIP	W	21	26.4	90 2	3.104	32.265	1.00	62.67	W
MOTA	1173	OH2	TIP	M	22	13.0	85 5	9.162	33.622	1.00	54.53	W
ATOM	1174	OH2		W	23	-0.1	66 4	5.626	35.200	1.00	56.34	W
ATOM	1175	OH2	TIP	W	24	-10.2	78 6:	2.692	33.867	1.00	64.05	W
ATOM	1176	OH2		W	25	22.6	97 10	0.892	29.710	1.001	.00.00	W
ATOM	1177	OH2	TIP	W	26	4.2	81 33	9.194	26.136	1.00	62.29	W
ATOM	1178	OH2		W	27	22.8	33 20	0.843	19.882	1.00	59.57	W
MOTA	1179	OH2	TIP		28	-10.0	30 74	4.838	23.517	1.00	53.18	W
MOTA	1180	OH2	TIP		29	1.2		0.456	24.973	1.00	36.18	W
ATOM	1181		TIP		30	-3.03		5.181	17.506	1.00	50.44	W
ATOM	1182		TIP		31	1.43		9.275	18.155	1.00	44.03	W
ATOM	1183	OH2			32	6.2		1.921	23.710	1.00	31.68	W
ATOM	1184	OH2			33	27.13		3.497	40.798		60.31	W
ATOM	1185	OH2			34	24.32		3.221	41.51~		85.52	W
ATOM	1186	OH2			35	24.49		5.009	31.850		68.20	W
MOTA	1187	OH2			36	17.2		3.540	41.621	1.00		W
ATOM	1188	OH2			37	17.17		7.169	41.299	1.00	57.26	W
ATOM	1189	OH2			38	17.13		1.154	42.769		94.65	M
ATOM	1190	OH2			39	23.96		.473	38.207		73.43	W
ATOM	1191	OH2	TIP	W	40	26.64	16 30	299	35.030	1.00	86.46	W

Figure 11T

ATCM	1192		TIP	W 41	21.799	33.921	. 37.475	1.00 98.23	W
ATOM	1193			W 42	12.296	24.508	37.800		W
ATOM	1194		TIP		10.910	28.524	40.599	1.00 65.23	W
ATOM	1195			W 44		30.065	36.214	1.00 62.46	W
ATOM	1196			W 45			34.804	1.00 62.12	W
ATOM	1197			W 45			29.170	1.00 88.23	W
ATOM	1198		TIP			31.280	33.124	1.00 56.10	W
MOTA	1199		TIP				36.241	1.00 52.76	W
ATOM	1200		TIP		3.823	27.148	35.557	1.00 92.76	W
ATOM	1201		TIP		7.608	28.183	32.367	1.00 83,54	W
ATOM	1202		TIP		10.064	35.767	38.975	1.00 68.12	W
ATOM	1203		TIP		14.649		38.236	1.00 73.09	W
ATOM	1204		TIP		16.799		39.778	1.00 48,69	W
MOTA	1205		TIP		15.456		39.598	1.00 48.97	W
ATOM	1206		TIP		8.442		37.753	1.00 57.63	W
ATOM	1207		TIP !		9.926		39.986	1.00 80.20	W
ATOM	1208		TIP !		3.713	35.630	32.034	1.00 65.94	W
ATOM	1209		TIP !		4.004	32.569	30.481	1.00 98.02	W
ATOM	1210		TIP 1		13.514	45.594	36.374	1.00 45.92	W
ATOM ATOM	1211		TIP (12.274	44.358	32.693	1.00 69.72	W
ATOM	1212 1213		TIP (-1.770	41.459	30.288	1.00 86.62	W
ATOM	1214		TIP (-0.747	39.619	34.003	1.00 85.57	W
ATOM	1214		rip (rip (2.370	42.056	36.997	1.00 63.26	M
ATOM	1216		LID A		7.646	47.813	26.559	1.00 86.77	M
ATOM	1217		TIP V		-1.942	50.096	25.818	1.00 33.47	W
ATOM	1218		TIP V		-0.455 -1.850	48.262	24.057	1.00 48.49	W
ATOM	1219		TIP V		-4.779	44.976	32.352	1.00 46.88	W
MCTA	1220		CIP V		-8.800	47.469 47.417	30.587 33.155	1.00 53.38	W
ATOM	1221		CIP W		-7.762	51.374	35.608	1.00 55.34 1.00 72.46	M
MOTA	1222		CIP W		5.493	50.307	35.418	1.00 63.93	W W
ATOM	1223	OH2 T	TP W	72	-2.293	60.557	33.176	1.00 58.13	W
ATOM	1224	OH2 T	TP W	7 73	-3.891	59.956	22.859	1.00 42.99	W
MOTA	1225	OH2 I	TP W	74	-2.324	52.365	23.808	1.00 68.12	W
MOTA	1226	OH2 I	IP W	75	-4.610	53.603	23.534	1.00 99,86	W
ATOM	1227		IP W	76	-5.369	51.351	24.806	1.00 66.59	W
ATOM	1228		IP W		-9.158	53.927	27.711	1.00 59.38	W
ATOM	1229		IP W		-6.839	60.379	22.155	1.00 48.43	W
ATOM	1230		'IP W		-7.811	55.209	31.835	1.00 63.25	W
ATOM	1231		'IP W		-8.988	55.740	34.680	1.00 48.03	W
ATOM	1232		IP W		-14.358	62.793	31.478	1.00 77.34	W
ATOM	1233		IP W	-	-14.884	67.194	30.264	1.00100.00	W
ATOM	1234		IP W		-13.964	62.903	27.850	1.00 61.59	W
ATOM	1235		IP W		-16.467	64.338	27.598	1.00 62,99	W
ATOM	1236		IP W		-14.165	71.419	31.235	1.00 58.55	W
ATOM ATOM	1237		IP W	86	~12.150	75.052	20.683	1.00 54.74	W
ATOM ATOM	1238 1239		IP W	87	-15.348	66.527	23.972	1.00 86.65	W
ATOM ATOM	1240		IP W IP W	88	23.657	18.784	16.110	1.00 46.11	M
ATOM	1240			89	21.774	13.448	17.383	1.00 55.62	W
ATOM	1242	OH2 T		90	28.955	20.801	18.398	1.00 47.29	W
ATOM	1243	OH2 T		91 92	19.043	22.428	18.931	1.00 70.31	W
ATOM	1244	OH2 T		93	32.348 31.544	21.741	32.055	1.00 80.85	W
ATOM	1245	OH2 T		94	30.484	26.386 31.504	31.293	1.00 80.53	W
MOTA	1246	OH2 T		95	28.981	30.812	24.099 18.458	1.00 51 19	W
ATOM	1247	OH2 T		96	25.233	35.680	28.569	1.00 98.45	W
MOTA	1248		IP W	97	25.740	37.432	31.266	1.00 53.47 1.00 96.40	W
MOTA	1249	OH2 T		98	18.343	27.853	17.008	1.00 95.40	W
MOTA	1250	OH2 T		99	26.162	40.002	24.887	1.00 87.39	W
MOTA	1251	OH2 T			18.896	37.649	32.149	1.00 63.29	W
								00 ,0.00	γv

Figure 11U

ATOM	1250	OH2	TIP	W	101	20.897	31.301	18.264		88.40	W
ATOM	1253	OH2	TIP	W	102	19.191	42.582	21.450		55.18	W
ATOM	1254	OH2	TIP	W	103	23.958	41.188	26.907		78.30	W
MOTA	1255	OH2	TIP	W	104	18.433	46.716	22.932		54.59	W
MOTA	1256	OH2	TIP	W	105	22.353	48.547	25.042		59.94	W
ATOM	1257	OH2	TIP	W	106	21.797	41.049	34.496		78.50	W
ATOM	1258	OH2	TIP	W	107	21.437	46.210	33.535	1.00	75.53	W
ATOM	1259		TIP	W.	108	14.907	43.959	21.380	1.00	54.55	W
ATOM	1260	OH2	TIP	W	109	15.635	42.456	19.119		58.03	W
ATOM	1261				110	19.533	44.310	33.666		80.58	W
ATOM	1262		TIP	W	111	18.747	50.736	29.399	1.00	60.97	W
MOTA	1263		TIP			21.131	52.757	28.680		55.70	W
ATOM	1264		TIP		113	17.303	55.311	38.133	1.00	72.59	W
ATOM	1265		TIP		114	18.939	58.215	28.845	1.00	79.75	M
ATOM	1266		TIP			14.666	59.680	28.964	1.00	50.64	M
ATOM	1267				116	17.408	62.649	28.523	1.00	74.43	W
ATOM	1268		TIP		117	12.106	61.533	23.810	1.00	89.64	W
ATOM	1269	OH2	TIP			10.138	60.131	37.626	1.00	89.60	W
ATOM	1270				119	14.125	60.999	36.831	1.00	78.03	W
ATOM	1271	OH2	TIP			6.987	65.584	27.400	1.00	63.28	W
ATOM	1272	OH2			121	8.699	65.761	30.950	1.00	64.96	W
ATOM	1273	OH2	TIP		122	11.912	66.582	33.458	1.00	45.24	W
ATOM	1274	OH2	TIP			7.712	69.520	31.053	1.00	89.81	W
ATOM	1275	OH2			124	0.300	66.328	28.053	1.00	83.63	W
ATOM	1276	OH2	TIP			18.739	12.093	36.575	1.00	68.16	W
ATOM	1277	OH2	TIP			8.341	17.901	23.874	1.00	69.12	W
ATOM	1278	OH2			127	6.665	20.667	30.766	1.00	79.31	W
ATOM	1279	OH2	TIP			13.178	21.216	32.239	1.00	55.97	W
ATOM	1280	OH2			129	7.700	21.187	21,255	1.00	66.56	W
ATOM	1281	OH2	TIP		130	17.038	26.024	19.828	1.00	40.17	W
ATOM	1282	QH2	TIP		131	9.682	31.384	16.376	1.00	77.12	W
ATOM	1283	OH2	TIP		132	11.568	29.117	15,187	1.00	59.43	W
ATOM	1284	OH2	TIP		133	2.602	30.287	27.387	1.00	64.52	W
ATOM	1285	OH2			134	10.743	41.812	16.813	1.00	84.35	W
ATOM	1286	OH2	TIP		135	13.070	38.706	12.664	1.00	61.24	W
ATOM	1287	OH2			136	9.262	44.518	14.939	1.00	51.92	W
ATOM	1288	OH2	TIP		137	12.139	53.137	17.554	1.00	56.22	W
ATOM	1289	OH2	TIP			14.403	57.453	15.838	1.00	66.72	W
ATOM	1290	OH2			139	11.017	71.423	23.035	1.00	71.76	W
ATOM	1291	QH2	TIP		140	10.451	75.718	24.795	1.00	58.85	W
ATOM	1292	OH2			141	11.223	65.048	21.172	1.00	84.46	W
ATOM	1293	OH2	TIP			8.196	70.691	21.387	1.00	66.14	W
MOTA	1294	OH2	TIP		143	3.381	51.168	17.717	1.00	51.91	W
ATOM	1295	OH2	TIP		244	13.735	48.059	19.325	1.00	73.18	W
ATOM	1296	OH2	TIP			2.524	42.027	17.393	1.00	80.66	W
ATOM	1297	OH2	TIP		146	2.024	39.150	18.549	1.00	74.07	W
ATOM	1298	OH2	TIP		147	0.486	41.584	19.991	1.00	97.41	W
ATOM	1299	OH2	TIP		148	0.060	40.945	24.577	1.00	78.10	W
ATOM	1300	OHO	TIP		149	14.261	36.624	16.034	1.00	71.76	W
ATOM	1301	OH2	TIP		150	17.041	33.288	18.134	1.00	55.41	W
ATOM	1302	OH2	TIP			12.012	53.850	23.650	1.00	34.32	W
ATOM	1302	OH2		W	152	0.421	41.869	28.444	1.00	53.88	W
ATOM	1303	-		I	1	13.184	36.734	27 569		62.34	I
END	_ J V -*	- L			-						
77747											

Figure 11V